

AR59

1998  
Annual  
Report

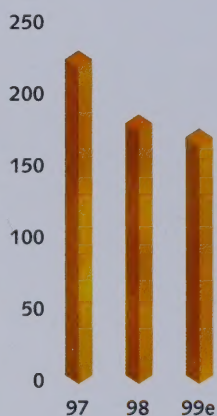
**TVX**  
GOLD INC.



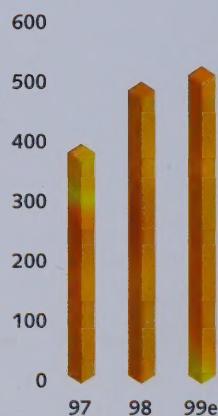
- 3 Chairman's Message
- 6 Summary of Operating Information
- 7 Summary of Reserves and Resources
- 8 Operations Review
  - 10 La Coipa
  - 11 Crixás
  - 12 Brasília
  - 13 New Britannia
  - 14 Musselwhite
- 15 Hellenic Gold
  - 17 Olympias
  - 19 Skouries
  - 21 Stratoni
- 23 Corporate Responsibilities
  - 24 Workplace Health and Safety
  - 25 Environment
  - 26 Social Responsibility
- 28 Financial Highlights
- 29 Management's Discussion and Analysis of Financial Results
- 40 Financial Information
- 55 Glossary
- 58 Summary of Quarterly Information
- 59 Seven-Year Financial Summary
- 60 Corporate Information

		1998			
		TVX Ownership	Production 000s oz.	Cost/oz.	Reserves 000s oz.
	La Coipa Chile	50%	225.6 <sup>1</sup>	\$161	2,419 <sup>1</sup>
	Crixás Brazil	50%	72.1	\$167	592
	Brasília Brazil	49%	88.8	\$234	1,707
	New Britannia Canada	50%	48.8	\$238	288
	Musselwhite Canada	32%	63.8	\$184	628
	Hellenic Gold Greece	100% *	under development	na	6,745

Cash Costs  
\$/oz.



Production<sup>1</sup>  
000s oz.



Reserves<sup>1</sup>  
million oz.



<sup>1</sup> Gold and gold equivalent

\* Under litigation, please refer to Page 52, Note 12(a) of this report

### Forward Looking Statements

Statements in this annual report contain forward looking information. These statements address future events and conditions and so involve inherent risks and uncertainties. Actual results could be significantly different from those projected.

All dollar amounts used in this report are in US dollars unless otherwise stated.

Cover:

TVX produced 499,100 gold equivalent ounces in 1998.

This represents record production for the Company.





## **TVX GOLD INC.**

is a Canadian-based, international  
gold mining company.

Its interests include five producing mines,  
located in Chile, Brazil and Canada, and  
two projects in Greece, at an advanced stage  
of development.

In 1998 the La Coipa, Crixás, Brasília,  
New Britannia and Musselwhite mines  
provided the Company with a  
total production of 499,100 ounces  
of gold equivalent at an average cash cost  
of US\$185 per ounce.

Shares of TVX trade on  
the Toronto, Montreal and New York  
stock exchanges.









**TVX Gold had a number of noteworthy accomplishments in 1998, despite it being a difficult year for the Company.**

Our gold equivalent production was the highest ever, increasing by 26% over 1997 to 499,100 ounces (324,600 ounces of gold and 9.9 million ounces of silver). We reduced our cash costs by 17% to an average of \$185 per gold equivalent ounce sold, the lowest in five years.

We completed bankable feasibility studies for the Olympias and Skouries projects in Greece which demonstrated the viability of both projects, even at current low metal prices. In its first five years of production, Olympias is expected to produce an average of 210,000 ounces of gold annually. Skouries is estimated to produce 200,000 ounces of gold annually in its initial years. Under the prevailing metals market conditions, the decision has been made to complete the Olympias project first. Skouries will be kept under review with a view to placing it in production at a later date. For Olympias, a start to construction is pending, while design optimization, partner discussions, permitting and financing are finalized.

We doubled our gold reserves as a result of the conversion of resources to reserves at the Greek projects. At the end of 1998, TVX Gold's total proven and probable reserves were estimated to contain 12.4 million ounces of gold equivalent (11.0 million ounces of gold and 77.7 million ounces of silver, not including an additional 40.7 million ounces of silver at Olympias accounted for as a by-product credit) compared to 6.2 million ounces of gold equivalent at the end of 1997. In addition, recent exploration on the 314 square kilometre Greek property has been encouraging, offering additional resource potential.

During 1998, TVX continued to take a critical look at its portfolio of assets, focusing its activities on its core operations and projects and reassessing its non-core assets. As a result, the Company took the decision to write down the value of two of its non-core assets, and this had a significant impact on the year's financial results. TVX posted a \$66.0 million (\$0.48 per share) loss in 1998, compared to a loss of \$49.8 million (\$0.36 per share) in 1997. Both years included non-core asset write downs: \$67.2 million in 1998 and \$43.4 million in 1997.

Earnings from mining operations before write downs declined to \$19.7 million from \$29.2 million in 1997, primarily because of lower realized precious metals prices. Cash flow from operations was \$84.8 million in 1998, compared to \$24.5 million in 1997. The increase in cash flow is primarily due to the impact of monetizing the Company's corporate hedge position, realizing a net \$40.3 million inflow, plus the impact of lower operating costs and a reduction in working capital requirements.



**Eike F. Batista**  
Chairman, President and  
Chief Executive Officer





## Chairman's Message



Year-end 1998 cash (\$41.2 million) and bank term deposits (\$52.0 million) totaled \$93.2 million. Year-end 1998 debt was \$199.0 million, including \$61.0 million drawn on the Company's revolving credit facility. The credit facility is subject to its first review of pricing and terms during April 1999.

The asset write downs in 1998 related to the non-operating Kasperske Hory and Kamchatka properties in the Czech Republic and Russia, respectively. At Kasperske Hory, negotiations to extend property access rights were unsuccessful and the Czech government advised the Company that the exploration licences would not be renewed. The Company is appealing this decision and evaluating its options, which may include legal remedies. The economic and financial situation in Russia had a negative impact on efforts to find a partner to earn in or purchase the Kamchatka properties controlled by the Company in the region.

Spot metal prices were disappointing in 1998, averaging \$294 per ounce for gold and \$5.28 per ounce for silver. However, because of its hedging program, TVX exceeded the spot price on its gold sales realizing an average of \$370 per ounce, although silver realized an average of \$4.34 per ounce. In 1997, realized metal prices were \$398 per ounce for gold and \$5.44 per ounce for silver.

TVX enters into hedging programs primarily to reduce the downside risk of metal price fluctuations. In the first quarter of 1998, it appeared that gold had reached a floor and silver was increasing in price, reacting to more bullish fundamentals and Warren Buffett's acquisition of a large position in the metal. Consequently, the Company substantially closed its gold position, and restructured its silver position, realizing a net \$40 million gain.

During the third quarter of 1998, the Company formed a Risk Management Committee to oversee future financial risk management activities. The risks addressed by the committee are metals prices, foreign currency fluctuations and changes in interest rates.

A disappointment in 1998 was the October ruling of the Ontario Court of Justice (General Division) in respect of the claim made by the Alpha Group against TVX relating to the Greek projects. While the Court rejected the Alpha Group's claim to full ownership of the Greek projects and substantial monetary damages, it did award the Alpha Group a 12% carried interest and an option to acquire a further 12% participating interest upon payment of the costs associated with that interest. TVX is appealing the ruling.

The feasibility studies for the Greek projects estimate construction costs of \$225 million for Olympias, before confirmed European Union grants (35% of eligible capital), and construction costs of \$240 million for Skouries, before possible European Union grants of up to 40% of eligible capital costs.




In the prevailing market, at current metals prices and existing debt levels, TVX is not generating sufficient cash flow to sustain the development of the Olympias and Skouries projects, in spite of the improved efficiencies at our mines and ongoing reductions in overhead. Thus, rather than persisting in developing the projects alone, management is studying the full range of options available to TVX for placing the Greek projects in production in a timely and effective manner. Joint venturing the projects with other companies is one option being given careful consideration.

Looking ahead, TVX expects its share of 1999 gold equivalent production to be similar to 1998 levels, with a further reduction in cash costs. Forecast production in 1999 is 509,000 ounces of gold equivalent (305,000 ounces of gold and 11.2 million ounces of silver). Cash costs in 1999 are forecast to be less than \$175 per ounce of gold equivalent sold, 5% lower than in 1998, principally due to the devaluation of the Brazilian currency relative to the US dollar. The significant silver production expected in 1999 is attributable to the high grade Chimberos silver deposit at La Coipa. Brought into production in July 1998, the Chimberos silver orebody will be mined out by March, but processing of stockpiled ore will continue through September.

TVX continues to benefit from its quality assets. Our five producing mines are reliable, stable operations with long-life reserves and low costs. We have two remarkable projects in Greece, a country in which I believe there are many other opportunities as well. In the last two years, TVX has demonstrated its ability to advance the Olympias and Skouries projects and improve its operating capabilities and effectiveness. There are still many challenges ahead as we seek to capitalize on our accomplishments, but we have the firm foundation on which to build, no matter which route we take.

On behalf of the Board of Directors, I thank our employees for their contributions to our many successes in 1998. These are not the easiest of times and their efforts are truly appreciated.



  
**Eike F. Batista**

Chairman, President and Chief Executive Officer

March 11, 1999

## Summary of Operating Information

		December 31, 1998			December 31, 1997		
		Gold Production	Cash Cost <sup>(2)</sup>	Production Cost <sup>(3)</sup>	Gold Production	Cash Cost <sup>(2)</sup>	Production Cost <sup>(3)</sup>
Operating Mines		(Ounces)	(\$ per Ounce)		(Ounces)	(\$ per Ounce)	
La Coipa Chile <sup>(1)</sup>	Open Pit	225,600 <sup>(1)</sup>	\$ 161	\$ 276	182,200 <sup>(1)</sup>	\$ 222	\$ 319
Crixás Brazil	U/G	72,100	\$ 167	\$ 227	64,100	\$ 187	\$ 247
Brasília Brazil	Open Pit	88,800	\$ 234	\$ 322	51,600	\$ 215	\$ 319
New Britannia Canada	U/G	48,800	\$ 238	\$ 336	45,700	\$ 279	\$ 388
Musselwhite Canada	U/G	63,800	\$ 184	\$ 301	48,900	\$ 208	\$ 329
Mines now closed		—	—	—	2,800	\$ 385	\$ 490
Total Company		499,100	\$ 185	\$ 287	395,300	\$ 223	\$ 320





## Summary of Reserves and Resources

	1998						1997			
	Mining Reserves Proven and Probable (Diluted)			Resources Measured and Indicated			Resources Inferred		Total	Total
	Tonnes (000s)	Ounces Au g/mt (000s)	Tonnes (000's)	Ounces Au g/mt (000s)	Tonnes (000s)	Ounces Au g/mt (000s)	Ounces Au (000s)	Ounces Au (000s)	Ounces Au (000s)	Ounces Au (000s)
<b>Operating Mines</b>										
<b>La Coipa</b>										
Gold		0.99 1,087		0.89 319	—	—	—	1,406	1,166	
Silver		71.0 77,705		43.4 15,606	—	—	—	93,311	109,056	
Gold Equivalent <sup>(1)</sup>	34,033	2.2 2,419	11,184	1.6 586	—	—	—	3,005	3,052	
Crixás	2,643	7.0 592	90	5.2 15	865	12.1 336	943	1,038		
Brasília	127,052	0.42 1,707	115,714	0.44 1,634	12,804	0.44 180	3,521	3,963		
New Britannia	1,801	5.0 288	604	5.2 102	395	5.2 65	455	445		
Musselwhite	3,452	5.7 628	895	8.6 246	500	7.6 123	997	956		
<b>TOTAL</b>		5,634		2,583		704	8,921	9,454		
<b>Development Focus</b>										
<b>Hellenic Gold <sup>(4)</sup></b>										
Olympias	11,797	8.0 3,030	3,260	7.7 806	1,350	6.6 286	4,122	3,900		
Skouries	129,548	0.9 3,715	61,685	0.7 1,326	14,822	0.6 287	5,328	5,957		
<b>TOTAL</b>		6,745		2,132		573	9,450	10,141		
<b>Projects</b>										
La Coipa Cu			14,914	0.5 226	—	—	—	226	—	
Gurupi	—	—	28,870	1.4 1,339	—	—	—	1,339	1,212	
Marves Petres			906	4.8 139	—	—	—	139	284 <sup>(1)</sup>	
Other	—	—	—	—	—	—	—	—	3,900	
<b>TOTAL</b>				1,704			1,704	5,396		
<b>GRAND TOTAL</b>		12,379		6,419		1,277	20,075	24,991		

(1) Includes silver converted to gold at applicable prices.

(2) Cash cost per ounce includes operating costs, marketing, refining, royalties and administration at the joint venture level, net of by-product credits and changes in inventory for differences in timing of production and sales, divided by ounces sold.

(3) Production cost per ounce comprises cash cost plus depletion, depreciation and reclamation.

(4) The properties are subject to a property ownership dispute as detailed on page 52, Hellenic Gold Litigation.

(5) Olympias reserves and resources also contain 114.0 g/t silver, 3.9% lead and 5.2% zinc.

(6) Skouries reserves and resources also contain 0.5% copper.

(7) La Coipa Cu resources also contain 6.0 g/t silver and 0.7% copper.

Reserves and resources have been calculated using the following per ounce prices: La Coipa and Musselwhite, gold at \$350 and silver at US\$6.00; Brasília, New Britannia and Olympias gold priced at US\$325; Skouries, gold at US\$300; and Crixás, gold at \$296.

Reserve figures are estimates, and no assurances can be given that the indicated quantities of gold will be produced. Market, short-term operating factors relating to the ore reserves, such as the orderly development of orebodies or the processing of new or different grades of ore, could affect the Company's profitability in any particular accounting period.

### Summary of Reserves and Resources by Category

Categories include: mining reserves (proven and probable), measured and indicated resources and inferred resources. Mining reserves (proven and probable) are fully delineated at operating mines or projects for which a feasibility study shows economic feasibility. Measured and indicated resources are estimated largely from drill data but for which a feasibility study has yet to be completed, although preliminary engineering studies indicate a high probability of becoming reserves on completion of planned feasibility studies. Inferred resources are additional resources based on geological inference and drilling.



TVX Gold's five joint-venture mines form the backbone of the Company. These operations are stable, reliable producers, distinguished by long-life reserves and low cash costs. TVX operates the New Britannia mine; Placer Dome operates La Coipa and Musselwhite; Rio Tinto operates Brasília; and AngloGold operates Crixás.

### 1999 Plans

- Production in 1999 is projected to be 509,000 ounces of gold equivalent (305,000 ounces of gold and 11 million ounces of silver), similar to 1998 production levels.
  - Cash costs are forecast to be \$175 per ounce of gold equivalent, 5% less than in 1998 because of continuing cost control measures as well as the devaluation of the Brazilian currency relative to the US dollar.
  - The Chimberos silver orebody will be mined out by March. Processing of stockpiled ore will continue through September. Mining will then resume in the La Coipa open pits, with gold equivalent production expected to return to historic levels.
  - Production at Brasília should return to an annual production level in excess of 100,000 ounces (TVX share) in the second half of the year, following the commissioning of the fifth grinding mill, with an associated decline in cash costs.
- ### 1998 Highlights
- TVX continued to maintain its high safety and environmental standards.
  - The New Britannia mine was recognized for its commitment to safety, winning the Canada-wide J. T. Ryan award.
  - Production reached a record 499,100 ounces of gold equivalent compared to 395,300 ounces of gold equivalent in 1997 (324,600 ounces of gold and 9.9 million ounces of silver in 1998 versus 318,300 ounces gold and 5.1 million ounces silver in 1997).
  - All five mines increased output over 1997, with La Coipa, Crixás, Musselwhite and New Britannia being on or ahead of plan. Brasília was 34,500 ounces below its original plan because of milling and recovery difficulties associated with processing of a new ore type. Plant modifications to resolve the problems, including installation of a fifth grinding circuit, should be in place in the second half of 1999.
  - Average cash costs, at \$185 per ounce of gold equivalent, were 17% less than the \$223 per ounce average for 1997. Higher than planned grades and recoveries contributed to La Coipa's 27% cost improvement over 1997. New Britannia's costs declined by 15%, and those at Crixás and Musselwhite by about 10%. Brasília's costs were higher than in 1997, but are expected to return to planned levels of less than \$190 per ounce later in 1999 with the introduction of the new grinding circuit and the depreciation of the Brazilian currency.
  - At La Coipa, processing of ore from the high grade Chimberos silver deposit began ahead of schedule, with grades and recoveries proving better than plan and offsetting in part a reduction in planned tonnage caused by a damaged gear in the primary grinding mill.
  - The Crixás mine benefited from an increase in mill throughput and ongoing efficiencies, implemented without significant capital expenditures.
  - New Britannia had a strong production year producing in excess of 97,000 ounces in total.
  - At year-end 1998, the Company's share of proven and probable reserves contained an estimated 12.4 million ounces of gold equivalent (11.0 million ounces of gold and 77.7 million ounces of silver with an additional 40.7 million ounces of silver at Olympias accounted for as a by-product credit), a 100% increase over the 1997 year-end estimate of 6.2 million ounces.



## Operations Review



**La Coipa**  
Chile



**New Britannia**  
Canada



**Crixás**  
Brazil



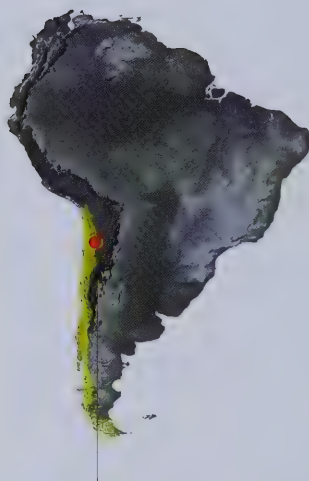
**Musselwhite**  
Canada



**Brasília**  
Brazil



## La Coipa



Location: Northern Chile

Interest: TVX 50%  
Placer Dome (operator) 50%

Type of Operation:  
Open pits; 16,000+ tpd mill

Recovery Method:  
Cyanide leaching,  
Merrill-Crowe

1998 Production (50%):  
225,600 oz gold equivalent  
(51,100 oz gold and  
9.9 million oz silver)

1998 Cash Costs:  
\$161/oz gold equivalent

1998 Year-end Total Resources  
(50%): 3.0 million oz gold equivalent  
(1.41 million oz gold and  
93.3 million oz silver)

Current Mine Life:  
10+ years



The La Coipa mine, situated 3,800 metres above sea level in the Atacama desert, is currently the largest contributor to TVX Gold's precious metals output. In 1998, gold equivalent production at La Coipa increased by 24% and cash costs per ounce decreased by 27% compared to 1997.

Production from the high grade Chimberos silver orebody began ahead of schedule in July 1998, with ore grades and recoveries proving better than planned throughout the year. Chimberos' reserves will support production through September 1999, after which mining operations will be resumed at La Coipa's main Ladera-Farallon and Coipa Norte pits. At that time the new mining equipment leased for the Chimberos operation may be purchased and transferred to the La Coipa pits, thereby alleviating potential problems caused by aging equipment.

Early in 1998, damage to the ring gear in the primary grinding mill reduced planned tonnage throughput by 20%. Installation of a temporary replacement gear was completed in January 1999, restoring throughput to normal capacity. Delivery of the permanent gear replacement is expected in the third quarter of 1999.

Ongoing exploration throughout the La Coipa property continues to indicate good potential for additions to total reserves. The acquisition of the Can-Can property, located within the La Coipa claim area, could allow expansion of the Ladera-Farellon open pits. Exploration carried out in 1998 on and around the Can-Can property resulted in the identification of promising targets for further work.

In 1999, TVX Gold's share of production from the Chimberos and La Coipa orebodies is projected to be approximately 214,000 ounces of gold equivalent (9,700 ounces gold and 11 million ounces of silver). Cash costs are anticipated to average about \$175 per gold equivalent ounce.

Mining Operations (TVX's 50% share)	1998	1997	1996
Tonnes milled (000s)	2,103	2,795	2,870
Grade g/t Gold	0.9	1.5	1.7
Silver	195.9	88.1	113.0
Gold equivalent	4.4	2.8	3.2
Gold equivalent recovery (%)	76	73	73
Production (000s oz)			
Gold	51.1	105.2	121.1
Silver	9,886.9	5,140.0	6,769.0
Gold Equivalent	225.6	182.2	210.5
Unit costs (\$/oz):			
Cash costs	161	222	202
Production costs	276	319	312
Capital expenditures (\$ millions)	11.9	11.5	3.2

1998 Gold Equivalent Reserves and Resources (50%)		Grade g/mt		
	Tonnes (000s)	Gold	Silver	Au equiv.
Reserves	34,033	0.99	71.0	2.21
Resources	11,184	0.89	43.4	1.63
Total Resources	45,217	0.97	64.2	2.07
Total Ounces (000s)		1,405	93,312	3,005



## Crixás

The Crixás underground mining operation is a consistent, low-cost producer, located approximately 260 kilometres northwest of Brasília, Brazil's capital.

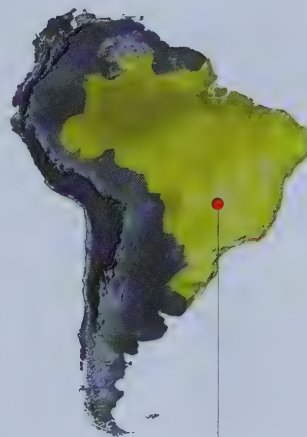
An optimization program conducted without significant capital expenditures in late 1997 resulted in a 10% increase in tonnage milled and ongoing improvements to efficiency in 1998. In 1998, gold production increased by 12% compared to 1997, while cash costs declined by 10% to \$167 per ounce. A further 10% expansion of mill capacity is under consideration.

Production is derived from the Mina III and satellite Mina Nova orebodies, which are mined from decline ramps. Based on current reserve estimates Crixás' current mine life stands at eight years.

In 1999, TVX Gold's share of production from Crixás is estimated to be approximately 74,000 ounces. Cash costs are projected to be less than \$150 per ounce, with the devaluation of the Brazilian currency being a contributing factor.

Mining Operations (TVX's 50% share)	1998	1997	1996
Tonnes milled (000s)	301	279	269
Grade g/t	7.8	7.5	7.6
Gold recovery (%)	95	95	96
Gold production (000s oz)	72.1	64.1	62.3
Unit costs (\$/oz):			
Cash cost	167	187	184
Production cost	227	247	246
Capital expenditures (\$ millions)	3.1	3.7	4.4

1998 Gold Reserves and Resources (50%)	Tonnes (000s)	Grade (g/t)	Total Gold (000s oz)
Reserves	2,643	7.0	592
Resources	90	5.3	15
Inferred Resources	865	12.1	336
Total Resources	3,598	8.2	943



Location: State of Goiás, Brazil

Interest: TVX 50%  
AngloGold (operator) 50%

Type of Operation: Underground mines;  
600,000+ tpa mill

Recovery Method: Cyanide leaching,  
Merrill-Crowe

1998 Production (50%):  
72,100 oz gold

1998 Cash Costs: \$167/oz

1998 Year-end Total Resources  
(50%): 0.94 million oz gold

Current Mine Life: 8 years







Location: State of Minas Gerais, Brazil

Interest: TVX 49%  
Rio Tinto (operator) 51%

Type of Operation: Open pit;  
18 million tpa mill

Recovery Method: Gravity, cyanide  
leaching, CIL, CIP, hydrometallurgy

1998 Production (49%):  
88,800 oz gold

1998 Cash Costs: \$234/oz

1998 Year-end Total Resources  
(49%): 3.5 million oz gold

Current Mine Life:  
13+ years

## Brasília

Located 200 kilometres southeast of Brasília, Brazil's capital city, the Brasília large tonnage, open pit operation is the country's second largest gold producer and one of the world's lowest grade gold mines. TVX Gold increased its interest in Brasília to 49% at the end of 1997 by buying out a partner's 16% share.

During 1998, processing of sulphide ore in the newly commissioned hydrometallurgical recovery plant was more difficult than expected, resulting in reduced mill tonnage and recoveries, an approximately 25% reduction in forecast production and higher cash costs. Modifications to the plant, including installation of a fifth ball mill, will be made during the second half of 1999, and will result in an increase in the plant's annual design capacity from 18 million to 21 million tonnes.

Once the plant modifications are implemented, TVX Gold's share of annual production from Brasília is expected to increase to originally forecast levels in excess of 100,000 ounces of gold for 1999. Cash costs are projected to decline to less than \$200 per ounce.

Mining Operations (TVX's 49%/33% share)	1998	1997	1996
Tonnes milled (000s)	7,651	5,049	4,470
Grade g/t	0.48	0.47	0.5
Gold recovery (%)	72	74	76
Gold production (000s oz)	88.8	51.6	54.5
Unit costs (\$/oz):			
Cash cost	234	215	202
Production cost	322	319	307
Capital expenditures (\$ millions)	2.4	12.5	7.6

1998 Gold Reserves and Resources (49%)	Tonnes (000s)	Grade (g/t)	Total Gold (000s oz)
Reserves	127,052	0.42	1,707
Resources	115,714	0.44	1,634
Inferred Resources	12,804	0.44	180
Total Resources	255,569	0.43	3,521





New Britannia

The New Britannia mine, operated and owned 50% by TVX Gold, is located in the town of Snow Lake in northern Manitoba, 700 kilometres north of Winnipeg.

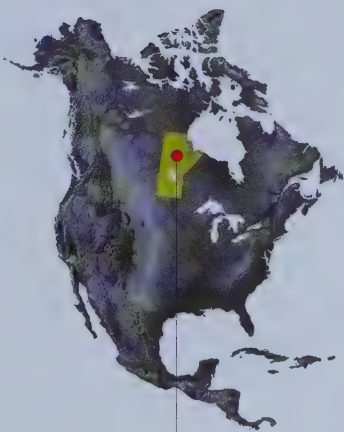
Ongoing efforts to improve operations at New Britannia proved very successful in 1998. Production was 7% higher than in 1997 and ahead of plan, with cash costs 15% lower than the previous year and below plan, despite lower grade ore being mined.

Exploration in the immediate mine area is focused on replacing mined-out reserves each year and this goal was met in 1998. Recent drilling continues to confirm that the orebody remains open at depth.

In 1999, TVX Gold's share of production from New Britannia is forecast at approximately 49,000 ounces. Cash costs are expected to be \$230 per ounce.

Mining Operations (TVX's 50% share)	1998	1997	1996
Tonnes milled (000s)	367	344	278
Grade g/t	4.5	4.6	4.4
Gold recovery (%)	91	90	88
Gold production (000s oz)	48.8	45.7	34.3
Unit costs (\$/oz):			
Cash cost	238	279	315
Production cost	336	388	409
Capital expenditures (\$ millions)	2.8	3.9	6.1

1998 Gold Reserves and Resources (50%)	Tonnes (000s)	Grade (g/t)	Total Gold (000s oz)
Reserves	1,801	5.0	288
Resources	604	5.2	102
Inferred Resources	395	5.2	65
Total Resources	2,800	5.1	455



Location: Manitoba, Canada

Interest: TVX (operator) 50%  
High River Gold 50%

Type of Operation: Underground;  
864,000 tpa mill

Recovery Method:  
Cyanide leaching, CIP

1998 Production (50%): 48,800 oz gold

1998 Cash Costs: \$238/oz

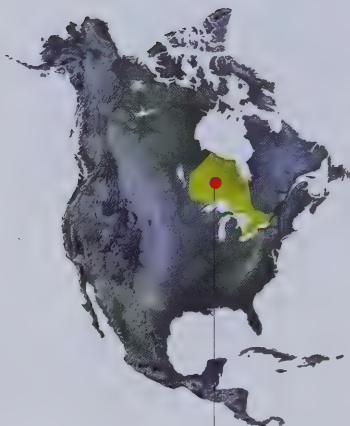
1998 Year-end Total Resources  
(50%): 0.46 million oz gold

Current Mine Life: 5+ years





## Musselwhite



Location: Northwestern Ontario, Canada

Interest: TVX 32%  
Placer Dome (operator) 68%

Type of Operation: Underground;  
3,300 tpd mill

Recovery Method: Gravity,  
cyanide leaching, CIL

1998 Production (32%):  
63,800 oz gold

1998 Cash Costs: \$184/oz

1998 Year-end Total Resources  
(32%): 1.0 million oz gold

Current Mine Life: 9+ years

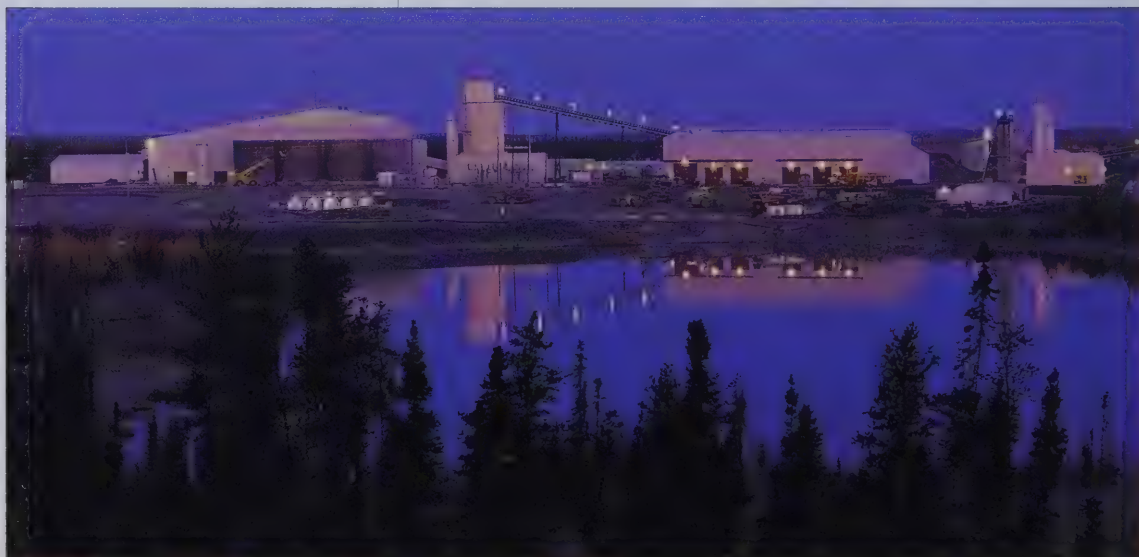
The Musselwhite mine is located at Opapimisk Lake, 430 kilometres north of the city of Thunder Bay in northwestern Ontario.

After a smooth start-up in 1997, Musselwhite met its production targets in 1998 at cash costs below forecast. Plans are in place to further develop the mine with the introduction of a dual ramp system. For 1999, the mine is expected to continue to operate as planned at current operating costs.

Exploration in 1998 was aimed at identifying reserves in the vicinity of the mine and significant reserve increases are anticipated in 1999. The Musselwhite property is considered to have good potential for additional resources.

In 1999, TVX Gold's share of production from Musselwhite is forecast to be approximately 63,000 ounces, with cash costs in the order of \$200 per ounce.

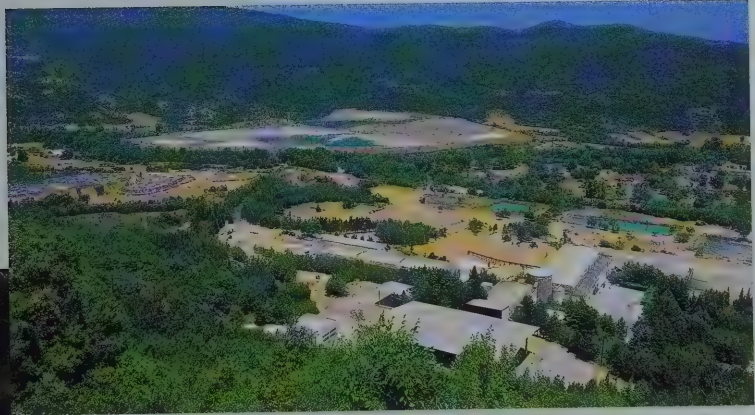
Mining Operations (TVX's 32% share)	1998	1997	
Tonnes milled (000s)	381	307	
Grade g/t	5.5	5.3	
Gold recovery (%)	95	94	
Gold production (000s oz)	63.8	48.9	
Unit costs (\$/oz):			
Cash cost	184	208	
Production cost	301	329	
Capital expenditures (\$ millions)	1.7	24.2	
1998 Gold Reserves and Resources (32%)	Tonnes (000s)	Grade (g/t)	Total Gold (000s oz)
Reserves	3,452	5.7	628
Resources	895	8.6	246
Inferred Resources	500	7.6	123
Total Resources	4,847	6.4	997





# Hellenic Gold

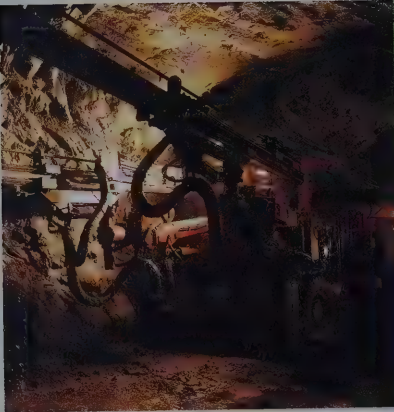
Greece



Olympias



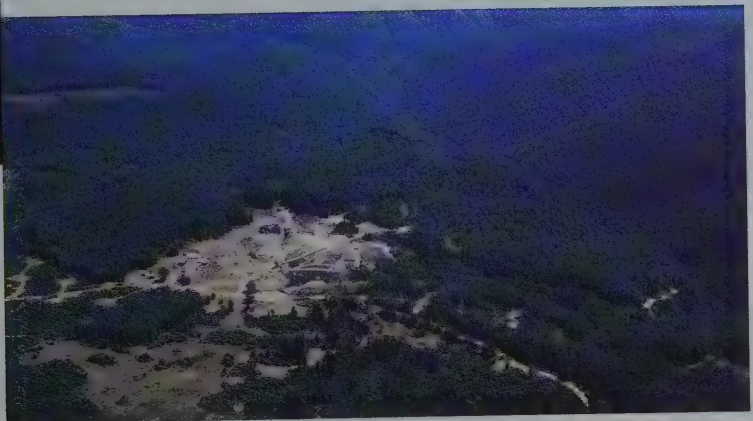
Olympias



Olympias



Skouries



Skouries





Location: Chalkidiki Peninsula, Greece

### 1999 Plans

- TVX's Greek subsidiary, TVX Hellas, plans to submit to the Greek government a planning application incorporating a dual technology approach, combining biooxidation and pressure oxidation processes, for the Olympias project.
- A revised bankable feasibility document for Olympias is anticipated during the third quarter.
- The Skouries project will be kept under review with a view to placing it in production at a later date.
- Financing arrangements for the developments will be a priority.
- The Company is investigating joint venture possibilities.

### 1998 Highlights

- Bankable feasibility studies were completed for both Olympias and Skouries deposits, which demonstrated the viability of both projects.
- The upgrading of resources to reserves, as part of the feasibility studies, resulted in a doubling of TVX Gold's proven and probable reserves.
- The Olympias feasibility study concluded that Olympias' proven and probable reserves alone will support a mine life of 15 years. Diamond drilling conducted since the completion of the study suggests that the mine life may be extended to 20 years. Based on current estimates, production for the initial years is projected to be 210,000 ounces of gold annually. Construction costs are anticipated to be \$225 million before European Union grants of 35% of eligible capital.
- Re-evaluation and optimization of the proposed Olympias process technology undertaken in co-operation with the Greek government concluded that a dual technology approach, employing both biooxidation and pressure oxidation, will be the optimum process in terms of satisfying both Greek government permitting and project viability considerations.
- The Skouries feasibility study concluded that Skouries' proven and probable reserves alone will support a mine life of 20 years. Production at Skouries should reach 200,000 ounces of gold per year in the initial years. Construction costs would be \$240 million, before anticipated European Union grants estimated at up to 40% of eligible capital costs.





## Olympias

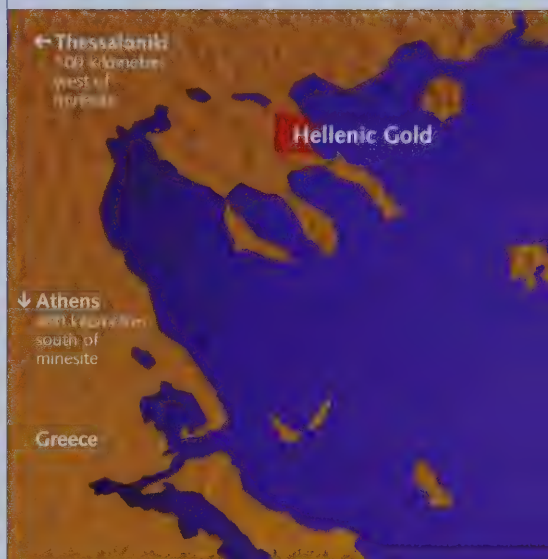
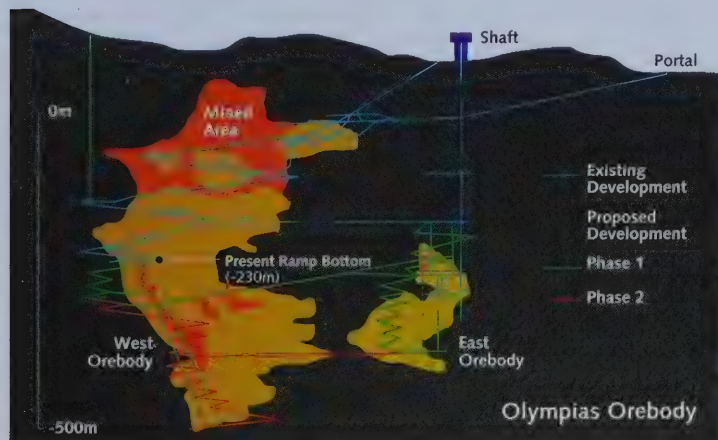
TVX acquired the Olympias deposit in 1995 as part of a large property package for which the Company paid approximately \$47 million. The basis for the purchase was the belief that the existing lead-zinc-silver mine, in production from 1976 to 1994, could be rehabilitated to include an efficient and economic gold operation. Previously the gold in the ore, which is closely associated with the arsenopyrite and pyrite, was not extracted because of its refractory nature.

The Olympias orebody is a stratabound massive sulphide deposit located at the contact of marble and gneiss rock formations. The west zone measures 200-400 metres along strike, over 1,000 metres down dip and averages 10 metres in thickness. The east orebody has a strike length of 100 metres, down dip length of 350 metres and a thickness ranging from 4 to 10 metres.

During 1998, TVX oversaw the completion of a bankable feasibility study for the Olympias project. According to the proposed development plan, a construction start at the end of 1999 would allow mining operations to begin within two years, at a rate of 1,500 tonnes per day, increasing to 2,700 tonnes per day in 2004. Construction costs are estimated at \$225 million, before European Union grants of 35% of eligible capital.

The Olympias feasibility study, which was conducted by Kvaerner Metals of the United Kingdom, concluded that the Olympias deposit would support a mine life of 15 years, based on proven and probable reserves. Additional resources and potential extensions to the orebody could extend the mine life to over 20 years. Drilling has continued since the completion of the feasibility study, adding to the known resources, and the orebody remains open at depth.

As a result of the co-operation between TVX Hellas and the Greek government regarding the implementation of the Olympias project, a re-evaluation to optimize the proposed process technology was undertaken. As an alternative to the planned full biooxidation process, both a full pressure oxidation process and a combined biooxidation and pressure oxidation process were evaluated.



Chalkidiki Locator

### Olympias Deposit Reserves and Resources

Classification	Tonnes (000s)	Au (g/t)	Ag (g/t)	Pb %	Zn %
Underground Reserves	9,104	8.7	138.3	4.7	5.9
Resources	4,610	7.4	131.1	4.6	7.0
Subtotal	13,714	8.4	135.6	4.6	6.3

### Stockpile Reserves

Pyrite	285	22.9	24.5		
Tailings	2,408	3.4			
Total	16,407	7.8	114.0	3.9	5.2

Calculated using the following metal prices:  
Au at \$325/oz. Ag at \$5.50/oz.  
Pb at \$0.25/lb and Zn at \$0.50/lb.



The dual technology approach of biooxidation and pressure oxidation is optimum in terms of satisfying both the Greek government permitting and project viability considerations. As a consequence of this analysis, TVX Hellas submitted to the Greek government a planning application utilizing the dual technology process option, in early 1999, to be followed by the completion and submission of a revised bankable feasibility document during the third quarter of 1999.

Olympias' reserves as of December 31, 1998, including a pyrite stockpile and tailings, are estimated to be 11.8 million tonnes averaging 8.0 grams of gold and 107 grams of silver per tonne, and to contain three million ounces of gold and 40.7 million ounces of silver. This estimate is based principally on 72,000 metres of underground drilling carried out by TVX since 1996. Prices of \$325 per ounce for gold and \$5.50 per ounce for silver were used to calculate the reserves; lower prices have only minimal impact, the reserves declining by about 2% using prices of \$300 per ounce of gold and \$5 per ounce of silver.

In its first five years of operation, when existing tailings and stockpiled concentrates will be processed along with ore from underground, Olympias is expected to produce approximately 210,000 ounces of gold and 2.1 million ounces of by-product silver per year, plus an average of 50,000 tonnes of zinc concentrate and 35,000 tonnes of lead concentrate. Cash costs over the first five years are forecast to be less than \$100 per ounce of gold, net of by-product credits utilizing \$5.75 per ounce silver, \$0.53 per pound zinc and \$0.28 per pound lead.

Access to the mine is provided by a ramp from surface to the 230-metre level in the west zone and by a 300-metre shaft which intersects the east zone and is used for hoisting ore. Plans for the new operation include two new ventilation raises, an extension of the current ramp, a new internal ramp to access the east zone from the 254 level, a hoist upgrade and installation of a larger skip capable of hoisting up to 3,500 tonnes per day. The backfill plant will also be replaced. Mining will be carried out by mechanized trackless drift and fill methods, with three mining areas operating simultaneously. Equipment will include 2-boom jumbo drills, load-haul-dump units for mucking the ore and 22-tonne trucks to haul ore to the shaft.

Based on these parameters, full production is anticipated within two years of the start of construction. The purchase contract for Olympias includes guarantees for TVX that permitting applications and approvals will be processed within certain time periods, which should ensure that the construction phase be completed as contemplated.



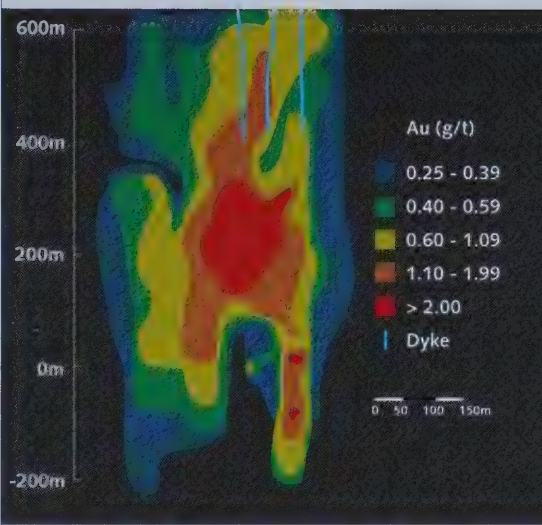
# Skouries

The Skouries gold-copper porphyry deposit lies 20 kilometres southwest of the Olympias mine in the Chalkidiki region of northeastern Greece. The deposit, which occurs within a syenitic porphyry plug with an oxide cap and surrounding altered mica schists, is 300 metres in diameter at surface and has been traced to a depth of 750 metres. Mineralization, contained in a stockwork of veins, is mostly chalcopyrite with local bornite, as well as cuprite and chalcocite in the oxide zone, and fine to coarse gold.

Consultants Kvaerner Metals of the United Kingdom completed a bankable feasibility study on Skouries in September 1998. Under the prevailing metals market conditions, the decision has been made to complete the Olympias project first. Skouries will be kept under review during 1999, with a view to placing it in production at a later date.

The feasibility study estimates construction costs of \$240 million for Skouries, before anticipated European Union grants estimated at up to 40% of eligible capital costs. Production in the first five years is expected to average approximately 200,000 ounces of gold and 32,500 tonnes of copper per year. Cash costs during this period are forecast at less than \$20 per ounce, net of copper credits at \$0.85 per pound.

Mineable reserves at year-end 1998 at Skouries consisted of 129.5 million tonnes averaging 0.89 grams gold per tonne and 0.56% copper, and contain an estimated 3.7 million ounces of gold, using base prices of \$300 per ounce gold and \$0.80 per pound copper. This reserve is sufficient for a 20-year mine life. The geological resource is 206 million tonnes averaging 0.80 grams gold per tonne and 0.54% copper, at a 0.40 grams gold per tonne cut off grade. Estimates are based on 65,100 metres of diamond drilling carried out by TVX mostly on a 50 metre x 50 metre grid, and exclude all prior work.



Skouries Gold Grade Contours

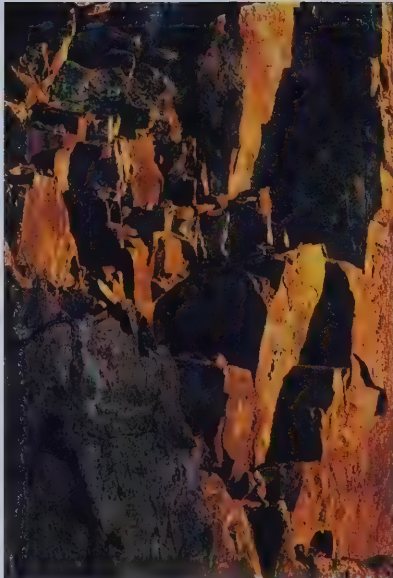
Skouries Deposit Reserves and Resources

Classification	Tonnes (000s)	Au (g/t)	Cu %
Reserves <sup>(1)</sup>	129,548	0.89	0.56
Resources <sup>(2)</sup>	76,507	0.66	0.52
Total	206,055	0.80	0.54

<sup>(1)</sup> Calculated using the following metal prices:

Au at \$300/oz and Cu at \$0.80/lb.

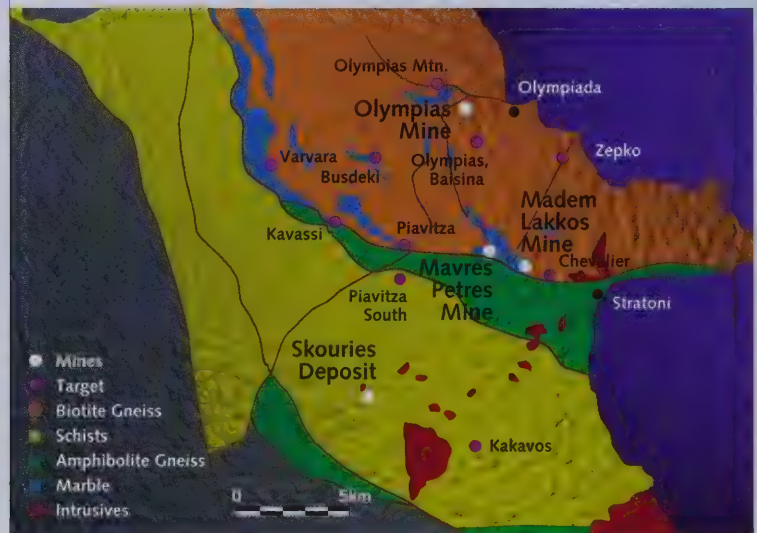
<sup>(2)</sup> Based upon a cut-off grade of 0.4 g/t Au.



A 3-stage mining plan is proposed for Skouries, incorporating an open pit to a depth of 240 metres in the first four years; sub-level caving in the central higher grade zone in the middle years; and block caving of the lower levels in the later years. Mine access will be by ramp. The 20-year mine life is based on the current mining plan and proven and probable reserves only. Mine infrastructure has been designed to allow for expansion. Construction would take about 21 months.

Metallurgical tests have shown the ore is amenable to a simple gravity/flotation recovery process. A plant processing 18,000 tonnes of ore per day is proposed. Recoveries over the life of the mine are forecast at approximately 87% for gold and 90% for copper. The copper concentrate is expected to be extremely clean and free of the normal range of penalty elements. It will be trucked to the shipping facility at Stratoni.

Recent geological and structural mapping suggests potential for other porphyry deposits in the area.



Regional Geology

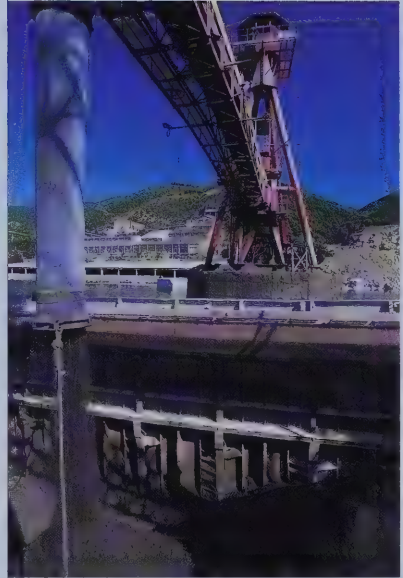


## Stratoni

In 1998, the Stratoni mill treated 246,200 tonnes of ore averaging 8.80% zinc, 9.81% lead and 200 grams per tonne silver from the Madem Lakkos mine, to produce 29,900 tonnes lead-silver concentrates and 36,300 tonnes zinc concentrates.

The Madem Lakkos mine is a small operation, developed by a 315-metre shaft and located about three kilometres west of the Stratoni mill. It has been operated by TVX since mid-1996 to help fulfill the Company's commitment to employ some of the 550 employees of the previous operations. On completion of the three-year commitment during 1999, employment levels will be reviewed and adjusted where necessary.

Since 1996, as a result of supervision, training and the introduction of modern equipment and methods, the mining operations have demonstrated a marked improvement in safety and productivity.






## Health and Safety Policy

TVX Gold Inc. is committed to providing and maintaining a safe working environment for its employees world wide. It is corporate policy to include health and safety as a priority in the design, construction, and operation of each mine and to ensure that all regulatory requirements are met. It is our belief that implementation of this policy is complementary to our goal of producing quality ounces.

### Specifically, it is TVX's policy to:

- designate a senior executive responsible for the overall management of health and safety at each enterprise;
- report routinely on health and safety;
- incorporate health and safety on all agendas for board and management meetings;
- provide industrial health and safety training to all employees;
- provide employees with the necessary equipment to work safely;
- establish systems to monitor industrial health and safety performance;
- communicate the results of the monitoring tests to employees;
- ensure that emergency plans for specified risks are in place and periodically tested;
- work with joint venture partners to achieve coherence of the TVX policy;
- require all major contractors to have in place equivalent procedures and to adhere to all site specific practices.

  
Clifford J. Davis  
Senior Vice President and  
Chief Operating Officer  
November 1998




## Environmental Policy

TVX Gold Inc. is committed to environmental conservation and protection in its business as a natural resources producer, contributing to society's material needs. TVX operations worldwide are required to understand their impacts on the local environment and to effect continuous improvement in environmental performance. Such improvements will consider best available technology and be responsive to the needs of the community.

### Specifically, it is TVX's policy to:

- construct and operate all facilities in compliance with applicable laws, regulations and standards; uphold the spirit of the law; and where adequate environmental laws do not exist, apply internationally recognized standards;
- promote good and effective communication with the relevant authorities, agencies, the general public and the media;
- ensure that it has management systems to identify, control and monitor environmental risks arising from its operations;
- encourage research on new technologies to conserve resources, minimize wastes, improve processes and enhance reclamation.

  
Clifford J. Davis  
Senior Vice President and  
Chief Operating Officer  
November 1998



# Corporate Responsibilities



**La Coipa**  
Chile



**Musselwhite**  
Canada



**New Britannia**  
Canada



**Crixás**  
Brazil



**Brasília**  
Brazil

## Corporate Responsibilities

TVX Gold is committed to conducting all of its day-to-day activities in a safe and environmentally responsible manner. Each action is guided by the Company's Health and Safety Policy and Environmental Policy. The Company takes an active role, as a good and responsible neighbour, in the communities in which it operates.

### Workplace Health and Safety

Health awareness and safety training programs are a primary component of TVX Gold's operations. New employees are given introductory orientation programs. Further instruction and training are given to all employees on an ongoing basis with the goal of improving safety performance on the job.

At the New Britannia mine, emphasis on training since start-up resulted in the mine completing a third consecutive year and over one million hours worked without a lost time injury in November 1998. The New Britannia mine was presented with the Canada-wide J. T. Ryan Award in 1998, in recognition of its 1997 safety performance. The mine was the recipient of the Ryan award for the Western Canada region in 1997.

Training programs at the Crixás operation have led to increasing numbers of local residents filling various positions.

The Brasília mine has received the British Safety Council's Sword of Honour and the International Loss Control

Institute's 5-star award for a number of years, in recognition of its safety achievements.

Since assuming ownership of the Greek property, TVX has significantly improved safety procedures, equipment and training. There has been a corresponding improvement in safety performance.

The accident frequency rate over the three years of TVX ownership has declined by approximately 80%. Over the same period, the severity rate, being the number of days lost due to injury, also improved by approximately 80%.

One of the most important contributions at the Greek projects was the formation of mine rescue teams, a pioneering effort in Greece. The volunteer rescue teams are made up of TVX Hellas employees who, with special training and necessary equipment, form emergency squads to enhance health and safety activities at the mine.

At non-TVX operated mines, the Company's operating partners continue to place a high priority on safety. Performance in 1998 continued to meet industry standards.





**Environment**

**TVX Gold acts on its belief that the protection of the environment is a priority in its business conduct.**

It does so by minimizing the environmental impact of its activities and carrying out reclamation on an ongoing basis. Each site that TVX operates develops an environmental program that complies with local, regional and national guidelines in conjunction with TVX's environmental policy. At sites operated by joint venture partners, TVX monitors their environmental actions.

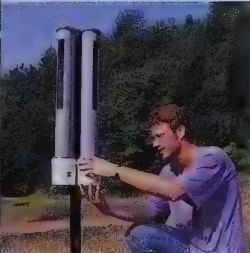
All operations continually upgrade their environmental practices. For example, in Greece, the Quality Control Laboratory was awarded ISO 9002 certification in December 1998. As well, the existing operation at Stratoni is working towards fulfilling the requirements for certification under the ISO 14000 program. This will ensure that environmental goals are fully integrated with the regular business activities of the operation.

TVX's operations and projects are located in diverse environmental settings. Each site works to preserve its own unique characteristics. During

1998, TVX Hellas fulfilled a major component of its property purchase contract, by completing expenditures in excess of \$7 million on rehabilitation and reclamation activities. The recent work under this commitment included reforestation of several areas including the Chevalier tailings dam, the Livadakia subsidence area, the Olympias Xerada area and over the Platia Karra pyrite stockpile.

Environmental monitoring continues to provide baseline information for the Greek projects as they are moved through the permitting processes. Monitoring programs include air, water, soils and biological parameters.

The New Britannia mine established an environmental data management system to improve data control. A crisis management plan was implemented to respond to anomalous situations. During 1998, the site of the mined-out No. 3 zone was re-contoured and covered with soil in readiness for re-vegetation in the spring of 1999. A limnology study of Herblet Lake was completed as a permit requirement for the mine's water outlet system.





## Social Responsibility

**TVX strives to build long-lasting relationships in the communities in which it operates.**

Community participation is encouraged, as are open discussions on developments and activities at all the operations.

At TVX Hellas, daily interaction with area residents allows for development plans to take into consideration the aspirations of the community as a whole. As a dynamic and socially responsible company, TVX Hellas informs the communities on matters such as the management of the environment, social policies and health and safety standards. A highlight of the community program was the establishment of a recycling program in the towns of Stratoni and Megali Panagia.

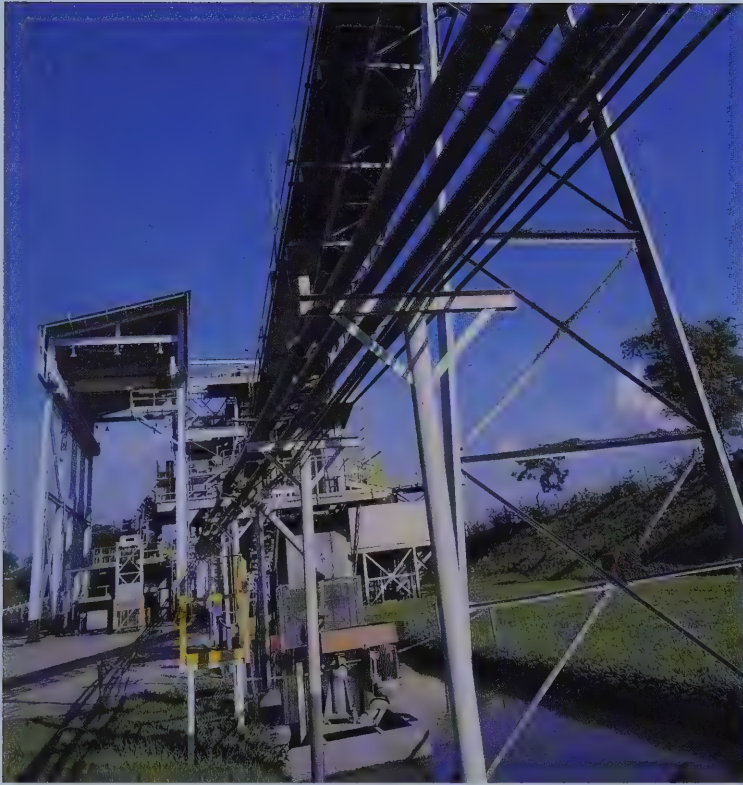
At all its properties, TVX is an active supporter of its neighbours' cultural and sporting events, as well

as activities which improve the local quality of life. In South America, youth and education are a particular focus for the Company's social commitment. The La Coipa operation is a major supporter of the San Lorenzo college in Copiapo, Chile, which provides education to 400 students from kindergarten to Grade 10. In Brazil, TVX continues to fund the Cruzada do Menor, an independent charitable organization which provides underprivileged children with nourishment, improved educational opportunities and training. In the town of Paracatu, the Brasília mine is the largest employer in town and a significant contributor to the local infrastructure, having built housing and assisted in the construction of the local hospital.

In Canada, the New Britannia mine has contributed to the local mining museum with funds and artifacts, published monthly newsletters to inform Snow Lake residents of its







activities and employed the local Boy Scouts to help plant 600 trees adjacent to the mine's tailings area. The Musselwhite mine signed an agreement with four First Nations communities to provide training, employment, apprenticeship and contract opportunities. At present, 30% of its employees come from native communities.

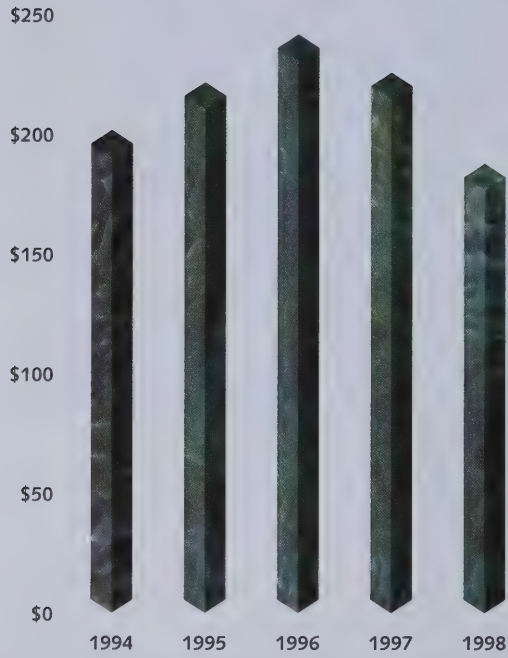
In all TVX locations, students are hired during the summer period to gain valuable work experience and financial support for continuation of their educational studies.

Through these and various other actions, TVX continues to evolve in its role as neighbour and partner in the communities in which it operates.

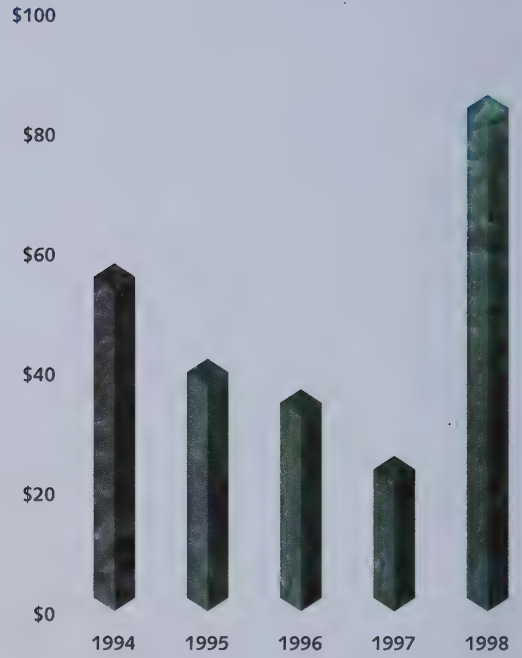


## Financial Highlights

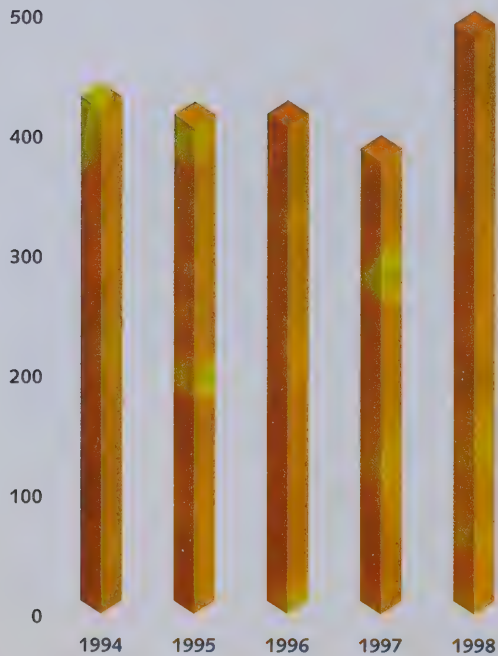
Cash Costs (US\$/oz.)



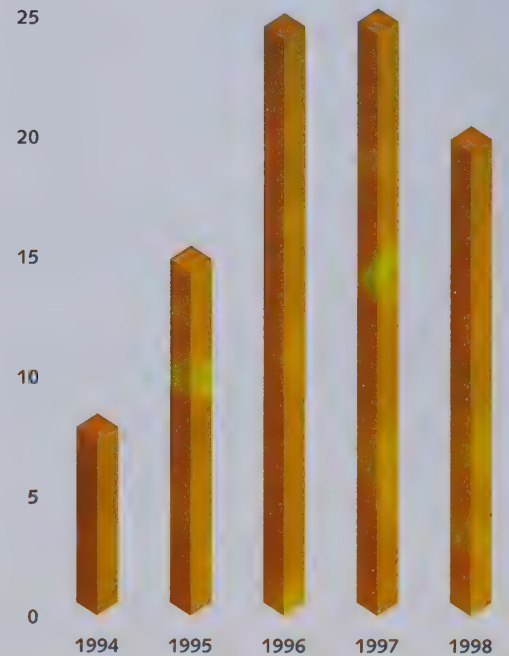
Cash Flow (\$ millions)



Production (000s oz. gold eq.)



Resources (millions oz. gold eq.)





## Management's Discussion and Analysis of Financial Results

Management's Discussion and Analysis provides a review of TVX Gold Inc., its subsidiaries and joint venture interests for year over year changes between 1998 and 1997 plus expected trends into 1999. It should be read in conjunction with the audited financial statements and the annual report. All dollar amounts are expressed in United States dollars unless otherwise stated.

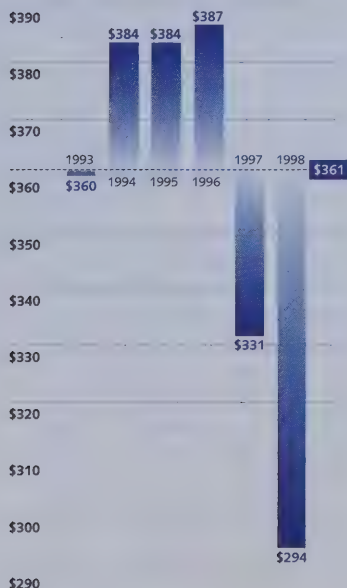
### Summary

The year 1998 was one of strong production and reduced costs. The benefits from the development of the Musselwhite mine in 1997 and Chimberos silver deposit in 1998 and an increased ownership interest in Brasília were primarily responsible for generating a 26% increase in gold equivalent production over 1997. Total cash costs per gold equivalent ounce sold show a corresponding 17% reduction to \$185 from \$223 in 1997.

The Company also completed bankable feasibility studies for the Olympias and Skouries projects, confirming their positive economics at current metal prices. This resulted in a significant increase in ore reserves for the Company with the addition of 6.8 million gold ounces of reserves, which in 1997 were categorized as resources. Overall, TVX reserves have increased 100% from 1997 to 1998. Total resources, which includes reserves, have decreased by 20% principally due to the exclusion of the Czech Republic and Russian properties, which have been written down.

### Gold Price Versus 10 Year Average

10 Year Average = \$361



The Company's focus and profitability, however, have been significantly impacted by the continued decline in the gold price which averaged \$294 per ounce in 1998, 19% below the 10 year average price. This has limited the cash flow of many gold mining companies worldwide and restricted the access to capital through either the equity or debt markets.

The Company has determined, given the current market conditions and its existing debt levels, that it should seek partners to share in the development and financing of its Greek projects, Olympias and Skouries, which, based on the bankable feasibility studies, require \$465 million of funding, part of which will be funded by European Union grants. The Company is actively seeking such a partner. In addition, over the last three years TVX Gold has rationalized its international scope and re-prioritized capital investment programs. Operations with unacceptable operating results have been shut down, while development project spending has been curtailed in all regions except the Company's prominent Greek projects. Exploration funding has been substantially reduced and focused principally in the area of the five operating joint venture mines where success is most likely.

The ruling on the ownership dispute for the Company's Greek properties with the Alpha Group was issued in October 1998. The ruling confirmed TVX's ownership, subject to the award to the plaintiffs of a 12% carried interest and the right to purchase an additional 12% participating interest upon payment of the costs associated with that interest. Cash damages were not awarded to the plaintiffs. The Company has appealed this ruling, the Alpha Group has cross appealed, and a court hearing is expected in late 1999. The Company cannot definitively state what impact this continued dispute may have on the sell down of TVX's ownership interest in Greece or the success of project financing.

## Loss

The loss in 1998 totaled \$66.0 million compared to \$49.8 million in 1997. The Company's results were impacted in both years by mine property and non-operating asset write downs as follows:

(\$ millions)	1998	1997
<b>Mining Property</b>		
Mineral Hill	\$ -	\$ 17.5
	-	17.5
<b>Non-operating Assets</b>		
Russian properties	35.8	-
Kasperske Hory	31.4	-
Pachicutza	-	11.4
Other	-	14.5
	67.2	25.9
<b>Total</b>	\$ 67.2	\$ 43.4

Provisions were taken against two development projects in the Czech Republic and Russia, in part, because of the depressed gold price, but also due to the current mining, business and political environments in these countries. The 1997 results included a provision for closure costs at Mineral Hill following the unsuccessful efforts to sell the property as well as a write off of the Pachicutza property in Ecuador.

## Revenue

Revenue from 495,500 ounces of gold and gold equivalent sold during the year was \$162.1 million, similar to the \$161.4 million from the sale of 413,500 gold and gold equivalent ounces reported in 1997. Silver sales increased by 67% in 1998 due to the start of production in July 1998 from the Chimberos high-grade silver deposit near La Coipa.

## Metal Sold (ounces in thousands)

Gold equivalent basis	1998	1997
Silver	9,780	5,855
Gold equivalent of silver	172.1	87.7
Gold	323.4	325.8
<b>Total</b>	<b>495.5</b>	<b>413.5</b>

Realized revenue on a gold equivalent ounce basis was \$327 in 1998 and \$390 in 1997, as compared to the London PM fix averages of \$294 and \$331, respectively. The Company's price realized per ounce sold differs from the benchmark average price primarily as a result of its hedging program.

Gold equivalent per ounce	1998	1997
Spot revenue	\$ 294	\$ 331
Hedging	18	54
Deferred revenue	15	5
Realized per ounce	\$ 327	\$ 390

Realized revenue per ounce of gold equivalent declined by \$63 per ounce to \$327 from \$390 in 1997. The drop in the spot price of gold contributed \$37 per ounce while the Company has realized a net reduction of \$26 per ounce from hedging and deferred revenue. The impact to gold from hedging year over year was a positive \$4.4 million. However, losses on silver were a negative \$13.8 million due to the cost of restructuring the Company's silver hedge position in February 1998.

The Company regularly reviews its hedge position, with respect to market conditions which could cause a change in the Corporation's hedging position. This occurred in February 1998 when significant volatility entered into the silver market which saw the price rise to a high of \$7.81. The Company made a decision to monetize its gold hedges and restructure its silver hedges to draw the cash value out of the hedge program and position itself for a future price rise in both metals. Net proceeds of the cash down totaled \$40.3 million, consisting of \$99.1 million net profit from gold and \$58.8 million net cost for silver. To protect itself against any adverse movement in prices, the Company purchased one million ounces of gold put options maturing over 1999-2003 and 10 million ounces of silver puts maturing in 1999 and 2000.



These put options guarantee TVX a minimum gold and silver price of \$280 and \$5 respectively. The cost of these put options was included in the above stated net proceeds of \$40.3 million.

During the third quarter of 1998, the Company formed a Risk Management Committee to oversee future financial risk management activities. The risks addressed by the Committee are metals prices, foreign currency fluctuations and changes in interest rates.

A detailed description of the Corporation's current consolidated hedge position can be found on pages 48 and 49. Also detailed is the future amortization period for deferred revenue, which will have a significant impact on the Company's future earnings.

### Mine Operating Costs

#### Cost of Sales

In 1998, total cash costs were \$91.8 million as compared to \$92.0 million in 1997. On a gold equivalent ounce sold basis, cash costs were \$185 in 1998, down significantly from \$223 in 1997. The Company reports its operating costs based on standards set by the Gold Institute. Silver production from the La Coipa mine has been converted to gold equivalent ounces as recommended under the Gold Institute guidelines.

### Consolidated Production Cost Per Gold Equivalent Ounce Sold

Year ended December 31,	1998	1997
Direct mining cost	\$ 178	\$ 213
Deferred stripping	1	2
Other	5	4
Cash operating costs	184	219
Royalties	1	4
Total cash costs	185	223
Depletion and depreciation	98	96
Reclamation	4	1
Total production costs	\$ 287	\$ 320
Gold equivalent ounces sold	495,500	413,500
Mine operating costs (\$ millions)	\$ 142.4	\$ 132.2

Total cash costs at the La Coipa mine, which accounted for 39% of the cost of sales of TVX in 1998, decreased to \$161 per gold equivalent ounce sold in 1998 compared to \$222 in 1997. The change is a result of switching in July to mining the high-grade, short life, silver deposit known as Chimberos. As a result, production in the second half of 1998 was solely silver and is projected to continue until September 1999. As the cash cost reporting is performed on a gold equivalent basis, the relative value of gold to silver impacts the cash cost computation. The fact that the price of gold was relatively low as compared to silver saw the ratio of conversion drop to 57:1 as compared to 67:1 in 1997, which benefits the 1998 cash cost reporting.

At the Company's Brazilian mines, Crixás' total cash costs decreased to \$167 per ounce sold from \$187 in 1997 as a result of increased mill throughput and higher grades mined. The Brasília mine's total cash costs increased in 1998 to \$234 per ounce sold from \$215 in 1997. An expansion of the mill's capacity and addition of a hydrometallurgical plant to process the new ore type failed to perform as designed. Mine tonnage had to be reduced and mining was rescheduled to lower grade and softer ore zones in order to increase grinding efficiencies, resulting in gold production falling 28% below plan. An additional mill is planned for 1999 that should enable the mill tonnages to exceed 20 million tonnes per year, greater than the 18 million tonnes planned in the expansion exercise, and recoveries to increase. Gold production is expected to return to the original expansion plan levels following the mill modification.

At the Company's Canadian operations, the New Britannia mine's total cash costs decreased to \$238 per ounce sold in 1998 as compared to \$279 in 1997. The decrease is attributed to lower mining costs, reduced maintenance costs and higher production. The Musselwhite mine's total cash costs were \$184 per ounce sold as compared to \$208 in 1997. The reduction in costs was the result of lower mining costs partially as a result of the lower Canadian dollar.

The Company anticipates overall cash costs in 1999 to be \$175 per ounce sold, slightly lower than 1998's \$185. However, this forecast is most sensitive to Chimberos' silver production and the gold/silver conversion ratio for gold equivalent ounces, as well as the relative strength of the Brazilian Real, which weakened dramatically in January 1999.

#### **Depletion, Depreciation and Reclamation**

Depletion, depreciation and reclamation expenses increased to \$50.6 million in 1998 from \$40.2 million in 1997 or on a gold equivalent ounce sold basis, \$102 in 1998 and \$97 in 1997.

The marginal increase in unit cost per ounce was attributable to higher charges at La Coipa due to the change of mining to Chimberos which has a higher depreciation profile than La Coipa production.

The Company anticipates 1999 depletion and depreciation charges per ounce to be similar to 1998 amounts.

#### **Asset Carrying Values**

The Company annually reviews the carrying value of its operating and non-operating assets. Operating assets are evaluated by comparing the undiscounted future net cash flows against their current carrying value. When the cash flow demonstrates an impairment, the Company will write down its value. Operational considerations include projected operating cost structures, future capital requirements and estimates of mine life based on known reserves and expected resource upgrading. Metal prices utilized for the 1998 evaluation were \$325 (1997 - \$350) for gold and \$6.00 (1997 - \$5.50) for silver which are not inflated nor are the corresponding operating costs. The impact of the Company's hedge position and deferred revenue is considered in this exercise.

The Company believes that, based on the parameters utilized, the carrying values of its operating mines are recoverable. However, in 1997 a \$17.5 million charge was incurred which related to an additional accrual for closure costs at the Mineral Hill mine.

The Company has development projects in three regions: Olympias and Skouries in Greece, Kasperske Hory in the Czech Republic and various properties in Eastern Russia. Both the Greek properties completed bankable feasibility studies in 1998 and efforts to commence construction are pending finalization of optimizing the design, partner discussions, permits and financing. These properties are subject to a legal dispute over ownership interests (see page 52) which the Company is endeavouring to resolve. Management does not believe that the issues around these projects will impact the future recoverability of the \$226 million current carrying value. Based on year-end reserves, the carrying value per gold equivalent ounce for the combined operations is \$33 per ounce.



The Company, through its subsidiary, TVX Bohemia Dulni, has been evaluating for several years the Kasperske Hory project in the Czech Republic. In December 1998, the Czech Government advised TVX Bohemia Dulni that the property licences were revoked and would not be renewed. TVX Bohemia Dulni is evaluating its options, which may include pursuing legal remedies. The investment is covered by a Foreign Investment Protection Act between Canada and the Czech Republic and counsel has been retained to evaluate the merits of and advise on the procedures to advance a potential claim under this treaty. As a result, a charge of \$31.4 million against the full carrying value of the property has been taken.

In 1997, a feasibility study was completed at the Company's Asacha property in Russia. Subsequently, a partner was sought to earn-in or purchase outright, the various properties controlled by TVX in the region. This process has been negatively impacted by, among other things, the adverse economic and financial conditions in Russia and, as a result, the Company has taken a charge of \$35.8 million against the full carrying value of the property. The Company has obtained a two year moratorium on its licence obligations and will consider its future options in the region.

## **Corporate Administration**

Due to cost reduction efforts, corporate administration decreased to \$12.4 million in 1998 from \$14.2 million in 1997. On a per gold equivalent ounce sold basis, administration costs were \$25 in 1998 and \$34 in 1997. The Company anticipates corporate administration costs of less than \$10 million in 1999 following further cost reduction measures including the closure of the Bristol office in England.

## **Interest Expense**

Interest expense was \$5.5 million in 1998 and remained constant as compared to \$5.3 million in 1997. Interest capitalized in 1998, related to the Greek projects was \$9.0 million while 1997 included \$7.3 million. Interest for the convertible notes, which under Canadian GAAP requires them to be split into their liability and equity components, results in the majority of interest costs being charged to Shareholders' Equity.

Interest expense and capitalized interest, excluding project financing for Greece, are expected to be similar to 1998 levels in 1999.

## **Exploration**

Exploration spending, exclusive of property acquisition costs, amounted to \$6.3 million in 1998 as compared to \$14.0 million in 1997. Expenditures have been significantly reduced and are currently focused on and around the existing mining operations. Similar levels of spending to 1998 are expected in 1999.

## **Translation and Foreign Exchange Loss**

The impact of foreign exchange continued at consistent levels. The Company believes it is appropriate to continue to use the US dollar as the functional currency of its Brazilian operations despite the minimization of inflation in 1997 and 1998. As such, translation gains/losses will continue to be charged to earnings. The Company cannot predict foreign exchange fluctuations during 1999 due to the uncertainty in the Brazilian financial markets in early 1999, where two of the Company's primary operations are located.

## Interest Income

In 1998, interest income was \$9.8 million compared to \$9.1 million in 1997. The Company anticipates that interest income will be similar in 1999 to 1998.

## Other, Net

Other items were an income of \$2.1 million in 1998, while there was an expense of \$13.9 million in 1997. The expense in 1997 was principally the result of charges related to debt restructuring, losses on the Company's silver bought position and the reduction of the carrying value of its equity investment in Valerie Gold by \$7.7 million.

## Income Taxes

Effective tax rates on earnings before income taxes were an expense of 7.3% in 1998 and 7.1% in 1997. The effective rate is a composite from the various tax jurisdictions in which the Company operates. An analysis of the effective tax rate is included in Note 10 to the financial statements.

Despite incurring a consolidated loss in both years, tax charges of \$4.5 million and \$3.3 million were incurred. These charges arose principally from the South American operating mines and were not reduced by tax effecting losses in other jurisdictions.

## Cash Flow and Liquidity

### Operating Activities

Cash provided from operating activities totaled \$84.8 million in 1998, versus \$24.5 million in 1997. The increase in cash flow in 1998 was principally due to the restructuring of the Company's corporate hedging program which was monetized in early 1998, resulting in net cash proceeds of \$40.3 million. Other factors that increased cash flow were reductions in operating cash costs, exploration expenditures and working capital needs.

If gold and silver prices remain at their 1998 levels, then cash flow from operating activities in 1999 is expected to be at a lower level than 1998 due to significantly lower levels of hedging income.

## Investing Activities

Investments in mining property, plant and equipment were \$94.6 million in 1998 as compared to \$136.8 million in 1997.

### Capital Expenditures (millions \$)





Capital expenditures of \$22.0 million at the Company's operating mines were lower by \$33.9 million in 1998 due to the completion of construction at the Musselwhite mine and the expansion program at Brasília in 1997. Expenditures on non-operating projects, excluding Greece, were also lower by \$9.2 million due to reductions in spending in Russia with the completion of a pre-feasibility study in 1997. Expenditures for the Greek projects, which issued bankable feasibility studies in 1998 and prior to capitalized interest, totalled \$57.0 million as compared to \$56.9 million in 1997.

The Company realized net proceeds of \$1.1 million through export financings available in Brazil as compared to investing \$37.2 million in 1997 when the majority of the initial associated debts were raised. The Company expects these investments to remain consistent in future years as the associated debt levels remain consistent and are expected to be renewed each year.

Other proceeds were \$8.9 million in 1998 as compared to utilizing \$29.6 million in 1997. The 1998 amount includes a \$6.6 million contribution from TVX's joint venture partner's share of surplus cash flow generated at the New Britannia mine. The significant expenditure in 1997 principally relates to the net acquisition cost of \$19.8 million after the assumption of debt, for an additional 16% interest in the Brasília mine, and \$12.7 million for the purchase of the joint venture partner's share of the project financing at New Britannia.

Capital expenditures in 1999 for the five operating mines are forecast to be \$29 million while expenditures at the Greek projects will be dependent on the permitting, financing and construction schedule.

## Financing Activities

Net long-term debt financings, including convertible debentures, were an outflow of \$3.3 million in 1998 as compared to an inflow of \$154.4 million in 1997. The prior year included the issuance of \$250 million 5% Gold Linked Convertible Notes which was substantially utilized to repay the Company's \$150 million 7.51% Unsecured Notes and the New Britannia project financing. In addition, \$26.3 million was realized in 1997 from the receipt of Brazilian export financings.

## Cash Resources and Liquidity

The Company's net cash positions for the years ended December 31, 1998 and 1997 were \$41.2 million and \$44.3 million, respectively. Debt levels, current plus long-term, were \$199.0 million versus \$201.7 million in 1998 and 1997, respectively. Current operating cash flows are insufficient at current metal prices to fund the Company's overall capital requirements at its operating mines plus the Greek projects. A partner for Greece and project financing remain a priority for the Company.

## Risks

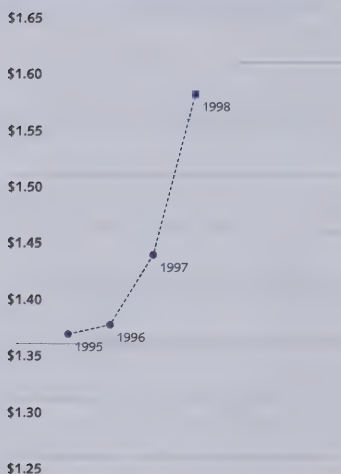
TVX operates in the precious metals mining industry and, in its normal course of business, manages geological, operational, geographic and financial risks. Past events at the Olympias project in Greece and at the Kasperske Hory project in the Czech Republic highlight such risks where a small but strong opposition to development of mining projects occurred due, in part, to the lack of understanding of modern mining practices. The Company has endeavoured to communicate its environmental responsibility, its commitment to safe operations and its willingness to be a contributing partner in the local communities.

Operational risks which could interrupt or impair future production include supply obstacles, physical asset damage or destruction, labour interruptions, unexpected ground conditions and incorrect estimates of geology and ore reserves. To manage these risks, the Company carefully plans and designs its mines, trains employees in safety and production methods, maintains adequate supply inventories and insurance and uses reputable consultants where appropriate.

Geographic risks arise from political, legal, social, structural and economic conditions. The Company has diversified its investment base, thus reducing its dependence on any one region. As well, some countries appreciate mining as a primary industry and a creator of wealth. This has increased access to mining properties in many countries around the world which traditionally have not been mining nations. TVX employs local management and advisors where possible to monitor and assess economic, political and legal developments which could affect the Company and to allow a prompt response to any new risk.

Commodity pricing, foreign exchange rates, interest rates and income taxes are some of the financial risks to which the Company is exposed. The last year and a half has demonstrated depressed prices in many commodities. Gold prices have fallen to their lowest levels since 1978. During 1998, the Canadian dollar weakened against the US dollar, while the Brazilian currency sharply devalued in January 1999.

#### Exchange Rates - \$Cdn - \$US



#### Exchange Rates - Brazilian Real - \$US



These currency movements will benefit local dollar operating costs, which exceed 60% of costs at all mines, while commodity revenues are US dollar based.

To protect against price volatility, the Company hedges precious metals production and Canadian dollar operating costs as is deemed appropriate. The Company estimates that a \$10 per ounce change in the gold price from a base level of \$300 per ounce will affect 1999 net earnings by approximately \$3.0 million. The Company's hedge program protects approximately 84% of gold production from this incremental impact on earnings in the event gold prices fall below \$280 per ounce.

#### Year 2000 Issue

TVX and its external business partners are dependent upon computer systems in many aspects of their business. The "Year 2000" issue is a universal term used to refer to potential problems with computer systems on the arrival of the new millennium in the event of failure to fully evaluate and remedy the exposure of switching from a two digit to a four digit date field.

The Company and its subsidiaries have advanced in their evaluation and remediation activities with respect to this matter. Programs are at various stages and involve varied approaches due to the fact that the Company operates only one of its five mines (New Britannia). The three operators of the Company's other mines are Placer Dome (La Coipa and Musselwhite), Rio Tinto (Brasília) and AngloGold (Crixás), all of which are international mining companies.

The Company's evaluation has determined that, while the operation of its mines is dependent on computer systems, the systems' level of sophistication is relatively low. This is due to the nature of mining, and, more particularly, due to the operations' straightforward processing facilities. The Company is currently devoid of complex milling operations such as autoclaves nor does it operate smelters or refineries. These areas are traditionally high in their automation and, as such, their computerization.



### **In-House Systems**

The general approach to the Year 2000 issue can be summarized as:

- identification of areas susceptible to failure
- prioritization of remediation or replacement of critical systems
- detailed assessment and resolution
- testing and/or vendor confirmation of compliance
- certification

In all instances, activities have progressed beyond the assessment stage, while many areas have been certified. The Company is not aware at this time of any material matters within its operating systems that cannot be remediated or replaced.

The Company's objective is to complete substantially all remediation or replacement of systems or hardware by the second quarter of 1999.

### **Third Party Relationships**

Mine operations are dependent on certain suppliers as well as significant government interactions. Each site is dealing directly with these outside parties to determine their particular exposure. Each site will determine its own risk profile and decide on such matters as stockpiling additional critical spares and supplies and develop contingency plans for such matters as failures in their power supply.

These matters are expected to be concluded in the third quarter of 1999.

### **Year 2000 Conclusions**

The Company benefits from the receipt of regular reporting by its joint venture operating partners while the Company is well advanced on its certification of the New Britannia mine. As such, TVX Gold does not expect the overall cost of remediation to be material and does not anticipate that operations will be materially impacted at the change to the new millennium.

However, such interruptions or failures of systems or supply chains may occur due to the significant uncertainty and order of magnitude that the Year 2000 issue may bring. For instance: the Company cannot benefit from standardized testing across all mines as there are no common operating systems across the Company's portfolio of mines; the extent of exposure to third party supply chains, despite diligent evaluations, can only be known when the new millennium arrives; continued evaluation, both within and outside the Company, of this issue may identify additional material concerns in the future.

## Management's Responsibility for Financial Reporting

**The accompanying consolidated financial statements of TVX Gold Inc. and all the information in this annual report are the responsibility of management and have been approved by the Board of Directors.**

The consolidated financial statements have been prepared by management in accordance with accounting principles generally accepted in Canada. When alternative accounting methods exist, management has chosen those it deems most appropriate in the circumstances. Financial statements are not precise since they include certain amounts based on estimates and judgements. Management has determined such amounts on a reasonable basis in order to ensure that the financial statements are presented fairly, in all material respects. Management has prepared the financial information presented elsewhere in the annual report and has ensured that it is consistent with that in the financial statements.

TVX Gold Inc. maintains systems of internal accounting and administrative controls in order to provide, on a reasonable basis, assurance that the financial information is relevant, reliable and accurate and that the Company's assets are appropriately accounted for and adequately safeguarded.

The Board of Directors is responsible for ensuring that management fulfills its responsibilities for financial reporting and is ultimately responsible for reviewing and approving the financial statements. The Board carries out this responsibility principally through its Audit Committee.

The Audit Committee is appointed by the Board, and all of its members are outside directors. The Committee meets at least three times a year with management, as well as the external auditors, to discuss internal controls over the financial reporting process, auditing matters and financial reporting issues, to satisfy itself that each party is properly discharging its responsibilities, and to review the annual report, the financial statements and the external auditors' report. The Committee reports its findings to the Board for consideration when approving the financial statements for issuance to the shareholders. The Committee also considers, for review by the Board and approval by the shareholders, the engagement or reappointment of the external auditors.

The consolidated financial statements have been audited by PricewaterhouseCoopers, the external auditors, in accordance with generally accepted auditing standards on behalf of the shareholders.

PricewaterhouseCoopers has full and free access to the Audit Committee.



**Eike F. Batisita**  
Chairman, President  
and Chief Executive Officer



**Alan M. De'ath**  
Senior Vice President  
and Chief Financial Officer

March 11, 1999



## Auditors' Report to Shareholders

We have audited the consolidated balance sheets of TVX Gold Inc. as at December 31, 1998 and 1997 and the consolidated statements of operations, deficit and cash flows for the years ended December 31, 1998 and 1997. These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with generally accepted auditing standards. Those standards require that we plan and perform an audit to obtain reasonable assurance whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation.

In our opinion, these consolidated financial statements present fairly, in all material respects, the financial position of TVX Gold Inc. as at December 31, 1998 and 1997 and the results of its operations and its cash flows for the years ended December 31, 1998 and 1997, in accordance with generally accepted accounting principles as established in Canada.

*PricewaterhouseCoopers LLP*

Chartered Accountants  
March 11, 1999  
Toronto, Canada

# TVX Gold Inc. Consolidated Statements of Operations

(thousands of United States dollars, except per share amounts)

For the years ended

	1998	December 31, 1997
<b>Revenue</b>	<b>\$ 162,111</b>	<b>\$ 161,411</b>
<b>Mine Operating Costs</b>		
Cost of sales	91,763	92,033
Depletion and depreciation	50,614	40,215
	<u>142,377</u>	<u>132,248</u>
<b>Earnings from mining operations before mine write downs</b>	<b>19,734</b>	<b>29,163</b>
Mining property write downs	—	17,500
<b>Earnings from mining operations</b>	<b>19,734</b>	<b>11,663</b>
<b>Other Expenses (Income)</b>		
Corporate administration	12,401	14,225
Interest expense	5,456	5,334
Exploration	6,260	13,993
Non-operating asset write downs	67,180	18,070
Translation and foreign exchange loss	1,886	1,688
Interest income	(9,816)	(9,050)
Other, net	(2,101)	13,877
	<u>81,266</u>	<u>58,137</u>
<b>Loss before income taxes</b>	<b>(61,532)</b>	<b>(46,474)</b>
Income taxes (note 10)	4,461	3,283
<b>Loss For The Year</b>	<b>(65,993)</b>	<b>(49,757)</b>
<b>Loss Per Share (note 8)</b>	<b>\$ (0.48)</b>	<b>\$ (0.36)</b>

## Consolidated Statements of Deficit

(thousands of United States dollars)

	1998	1997
<b>Deficit, Beginning of Year</b>	<b>\$ (82,938)</b>	<b>\$ (24,257)</b>
<b>Loss for the year</b>	<b>(65,993)</b>	<b>(49,757)</b>
Accretion of convertible notes (note 6)	(11,460)	(8,340)
Excess over book value from share repurchase	—	(584)
<b>Deficit, End of Year</b>	<b>(160,391)</b>	<b>(82,938)</b>

The accompanying notes form an integral part of these consolidated financial statements.



# Consolidated Balance Sheets

TVX Gold Inc.

(thousands of United States dollars)

	1998	December 31, 1997
<b>Assets</b>		
<b>Current assets</b>		
Cash and cash equivalents	\$ 41,232	\$ 57,048
Short-term investments	26,522	25,201
Accounts receivable	31,501	31,497
Inventories (note 2)	41,999	44,261
	<u>141,254</u>	<u>158,007</u>
<b>Mining property, plant and equipment (note 3)</b>	<b>557,829</b>	<b>582,278</b>
<b>Other assets (note 4)</b>	<b>51,079</b>	<b>63,327</b>
	<u>750,162</u>	<u>803,612</u>
<b>Liabilities</b>		
<b>Current liabilities</b>		
Bank indebtedness	\$ -	\$ 12,790
Accounts payable and accrued liabilities	33,793	35,073
Current portion of long-term debt (note 5)	67,334	56,223
	<u>101,127</u>	<u>104,086</u>
<b>Long-term debt (note 5)</b>	<b>131,661</b>	<b>145,433</b>
<b>Other liabilities (note 7)</b>	<b>25,859</b>	<b>25,180</b>
<b>Deferred revenue (note 9)</b>	<b>60,431</b>	<b>28,461</b>
<b>Deferred income taxes (note 10)</b>	<b>20,670</b>	<b>24,045</b>
	<u>339,748</u>	<u>327,205</u>
<b>Shareholders' Equity</b>		
<b>Capital stock (note 8)</b>	<b>361,052</b>	<b>361,052</b>
<b>Gold linked convertible notes (note 6)</b>	<b>209,753</b>	<b>198,293</b>
<b>Deficit</b>	<b>(160,391)</b>	<b>(82,938)</b>
	<u>410,414</u>	<u>476,407</u>
	<u>750,162</u>	<u>803,612</u>

Commitments and contingencies (note 12 and 13)

The accompanying notes form an integral part of these consolidated financial statements.

Approved on behalf of the Board



Eike F. Batista  
Director



E. Ian Rugeroni  
Director

X  
F-X

= 632,940.

no pfl

→ cbv = cbv com

(thousands of United States dollars)

For the years ended

December 31,

1998

1997

**Operating Activities**

Loss for the year	\$ (65,993)	\$ (49,757)
Non-cash items:		
Depletion and depreciation	50,614	40,215
Deferred income taxes	(3,241)	(1,026)
Write downs and closure provisions	67,180	43,402
Other	1,962	1,578
Deferred revenue	33,492	11,413
	<u>84,014</u>	<u>45,825</u>
Changes in working capital	835	(21,302)
<b>Cash provided by operating activities</b>	<u>84,849</u>	<u>24,523</u>

**Investing Activities**

Mining property, plant and equipment	(94,553)	(136,846)
Investments	1,092	(37,215)
Other	8,896	(29,610)
<b>Cash used for investing activities</b>	<u>(84,565)</u>	<u>(203,671)</u>

**Financing Activities**

Net long-term debt borrowings (repayments)	5,507	(82,043)
Gold linked convertible notes	(8,817)	236,470
Common shares (note 8)	—	1,211
<b>Cash (used for) provided by financing activities</b>	<u>(3,310)</u>	<u>155,638</u>
<b>Decrease in Cash</b>	<u>(3,026)</u>	<u>(23,510)</u>
Net cash, beginning of year	44,258	67,768

**Net Cash, End of Year**

<u>41,232</u>	<u>44,258</u>
---------------	---------------

**Net Cash Consists of:**

Cash and cash equivalents	\$ 41,232	\$ 57,048
Bank indebtedness	—	(12,790)
	<u>41,232</u>	<u>44,258</u>

The accompanying notes form an integral part of these consolidated financial statements.



## Notes to the Consolidated Financial Statements **TVX Gold Inc.**

(United States dollars, unless otherwise stated. All amounts are expressed in thousands, except ounces and number of shares)

### 1. **Summary of Significant Accounting Policies**

These consolidated financial statements have been prepared in accordance with accounting principles generally accepted in Canada which, in the Company's case, conform in all material respects with accounting principles generally accepted in the United States, except as disclosed in note 14. The significant accounting policies followed by the Company and its incorporated and unincorporated joint ventures are summarized as follows:

#### (a) **Basis of consolidation**

These consolidated financial statements include the accounts of the Company and its subsidiaries. Investments in incorporated and unincorporated joint ventures are accounted for by the proportionate consolidation method as substantially all of the Company's business is conducted through joint ventures.

#### (b) **Use of estimates**

The preparation of the financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosures of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. The most significant estimates are related to the physical and economic lives and the recoverability of mining assets, mineral reserves, site restoration and related obligations, financial instruments and income taxes. Actual results could differ from those estimates.

#### (c) **Translation of foreign currencies**

The accounts of the Canadian operations and operations in foreign countries have been translated using the temporal method into United States dollars, because the Company considers the US dollar to be the principal currency of its operations. Under the temporal method, monetary assets and liabilities have been translated at the end of year exchange rates. Non-monetary assets, which primarily comprise mining property, plant and equipment, have been translated using historic rates of exchange. Revenues and expenses have been translated at the average rates of exchange during the years, except for depletion and depreciation, which have been translated at the same rates as the related assets. Foreign exchange gains and losses on current monetary assets and liabilities are included in the determination of earnings. Gains and losses related to long-term debt are deferred and amortized over the remaining term of the debt.

#### (d) **Commodity and Financial Instruments**

In the normal course of business, the Company uses agreements with financial institutions, principally derivatives, to hedge its exposure to fluctuations in metal prices, foreign exchange rates and interest rates. The intent is to protect the Company against downside price risk on future metal sales and cash flow risk on interest rates and foreign exchange.

The Company mitigates the credit risk exposure arising from these agreements by not concentrating its dealings with any one counterparty and transacting with financially sound institutions. Some derivative instruments entered into by the Company are subject to margin requirements, beyond varying threshold limits, in the event that metal prices significantly increase.

Commodity derivative hedging transactions include forward sales and options contracts. Realized gains and losses, as well as premiums, are recognized in revenue as the designated production is delivered. If contracts are amended or closed out before the planned delivery of the designated production, recognition of any gains or losses is deferred until their original designation period. Commodity commitments not designated as hedges are marked to market and the resultant gains or losses are recorded in earnings in the period.

The Company enters into lease rate swap agreements in conjunction with commodity contracts which are designated as hedges. Obligations under lease rate swap agreements, entered into expressly to finance options purchased, are marked to market at the balance sheet date and the resulting gains or losses are deferred until the related production is delivered.

The Company enters into forward foreign exchange contracts to hedge the effect of exchange rates on a portion of its future Canadian dollar currency requirements. Gains and losses are recognized and reported as a component of the related transactions.

The carrying amount of cash and cash equivalents, accounts receivable, accounts payable, current and long-term debt represent their fair value unless otherwise specified.

#### (e) **Inventories**

Gold and silver bullion inventories are stated at market. Doré, work-in-process, base metal concentrates and ore stockpiles are stated at the lower of cost and net realizable value. Materials and supplies inventories are stated at the lower of cost or replacement value.

**(f) Mining property, plant and equipment**

Mining property, plant and equipment is recorded at cost including costs associated with acquisition and further development of mining properties. Depletable assets are amortized over the life of the mine on a unit-of-production basis. The estimated mine lives range from 8 to 13 years with the average being 11 years. Depreciable assets are also amortized over the life of the mine on a unit-of-production basis except where the useful life of a depreciable asset is less than the life of the mine, in which case depreciation is recorded on a straight-line basis over its useful life.

The Company annually reviews the carrying value of its operating and non-operating assets. Operating assets are evaluated by comparing the undiscounted future net cash flows against their current carrying value. When the cash flows demonstrate an impairment, the Company will write down its value. Operational considerations include projected operating cost structures, future capital requirements and estimates of mine life based on known reserves and expected resource upgrading. Metal prices utilized for the 1998 evaluation were \$325 (1997 - \$350) for gold and \$6.00 (1997 - \$5.50) for silver which are not inflated nor are the corresponding operating costs. The impact of the Company's hedge position and deferred revenue is considered in this exercise.

**(g) Exploration**

Exploration expenditures, excluding property acquisition costs, are charged to earnings as incurred. When it has been established that a mining property has development potential, further exploration costs incurred prior to the start of mining operations, are recorded as deferred development costs and amortized in accordance with the policies described under note 1(f).

**(h) Reclamation costs**

Expenditures relating to ongoing environmental and reclamation programs are charged against earnings as incurred or capitalized and amortized depending on their future economic benefit. Estimated future reclamation costs, including site restoration, where reasonably determinable, are charged against earnings over the estimated useful life of the mine. These estimates are based on current standards or higher. These standards are subject to future legislative changes which will be reflected in the estimates when passed.

**(i) Income taxes**

Deferred income taxes are provided as a result of timing differences that arise from the recognition of revenue and expenses in different years for accounting and for income tax reporting purposes. Taxes have been provided on undistributed earnings of non-Canadian operations based upon the level of expected remittance of these earnings.

**(j) Financing costs**

Debt issue costs are deferred and amortized over the term of the debt. Interest and debt issue costs, whether incurred directly or indirectly, are capitalized when they arise from indebtedness incurred to finance development activities on mining properties and are amortized to earnings when production commences.

**(k) Cash and cash equivalents**

Cash and cash equivalents include those short-term money market instruments which, on acquisition, generally have a term to maturity of three months or less. Short-term investments represents short-term money market instruments greater than three months and less than one year.

**2. Inventories**

	December 31,	
	1998	1997
Bullion and doré	\$ 2,513	\$ 1,422
Base metal concentrates	1,483	4,572
Work-in-process	2,366	4,496
Ore stockpile	18,762	15,908
Materials and supplies	16,875	17,863
	<u>41,999</u>	<u>44,261</u>



### 3. Mining Property, Plant and Equipment

	December 31,	
	1998	1997
Mining property and deferred development	\$ 317,180	\$ 369,250
Accumulated depletion	(146,272)	(133,720)
	<u>170,908</u>	<u>235,530</u>
Mine plant and equipment	284,124	213,776
Accumulated depreciation	(131,484)	(98,485)
	<u>152,640</u>	<u>115,291</u>
Greek development projects	225,562	159,175
Projects under development (a)	-	57,448
Assets held for disposal	8,719	14,834
	<u>234,281</u>	<u>231,457</u>
	<u>557,829</u>	<u>582,278</u>

- (a) As a result of continued low gold prices and uncertainty in the Russian economy, the Company has written off the book value of its Russian properties totaling \$34,161. In addition, due to a property access rights dispute with the Czech Republic government, the Company has also written off the full book value of its Czech Republic properties, totaling \$29,419. An accrual of \$3,600 for carrying costs on these properties has been made.

Capitalized interest included in the above amounts totaled \$22,599 (1997 - \$14,299).

### 4. Other Assets

	December 31,	
	1998	1997
Bank term deposits with terms greater than one year	\$ 25,470	\$ 30,096
Receivable from High River Gold Mines Ltd.	20,950	29,019
Other	4,659	4,212
	<u>51,079</u>	<u>63,327</u>

### 5. Long-term Debt

	December 31,	
	1998	1997
Hellenic Gold purchase mortgage (a)	\$ 10,074	\$ 15,547
Revolving credit facility (b)	61,000	64,000
Crixás export loans (c)	8,750	9,502
Brasília export loans (c)	59,362	62,590
Other (d)	22,109	3,500
Gold linked convertible notes (note 6)	37,700	46,517
Total debt	<u>198,995</u>	<u>201,656</u>
Less: Current portion	(67,334)	(56,223)
Long-term debt	<u>131,661</u>	<u>145,433</u>

- (a) Under the terms of the purchase agreement for the Hellenic Gold assets, the Company has a mortgage, which is collateralized by the property. This mortgage is payable in Greek drachmas in two equal annual installments ending December 21, 2000. It bears interest equal to the average annual Greek State bond rate, which was 10.5% in 1998.

- (b) On November 20, 1997 the Company entered into a revolving credit facility ("RCF") with a group of international banks. The RCF provides the Company with a maximum credit facility of \$180 million which can be drawn in a combination of US dollars, Canadian dollars, gold and silver. The RCF is unsecured and has a maturity date of December 31, 2001. The outstanding debt drawn is repayable in US dollars and bears interest at US Libor plus a premium between 0.45% and 0.6875% based upon the Company's performance against an earnings covenant test. The total facility is subject to a fee between 0.2% and 0.3125%. The facility is subject to a review of pricing, amount and terms in April, 1999.
- (c) The Brazilian mines received advances against future export commitments. These loans are denominated in US dollars and bear interest at an average rate of 8.0%. It is the intention of the joint venture partners to renew these loans at their next maturity. The Brasília loan value has corresponding cash deposits to match each and all maturities. The deposits are included in cash, short-term investments and other assets.
- (d) The Company has a liability of \$3,977 under a Lease Rate Swap ("LRS") arrangement with a notional amount of 244,800 gold ounces. The LRS is used to finance gold put options and matures quarterly to March 2003. The Company also has a debt facility totaling \$17,200 for one of its subsidiaries, which has a 180 day maturity and terms similar to the RCF. This facility is intended to be rolled upon its maturity. In addition, the Company holds a mortgage of \$932 payable over the next eight years.
- (e) Long-term debt maturing after December 31, 1998 is as follows:

Facility	(a)	(b)	(c)	(d)	"Notes"	Total
1999	4,600	—	34,862	18,249	9,623	67,334
2000	5,474	—	31,750	1,049	10,501	48,774
2001	—	61,000	1,500	1,049	11,459	75,008
2002	—	—	—	1,049	6,117	7,166
2003 and beyond	—	—	—	713	—	713
	10,074	61,000	68,112	22,109	37,700	198,995

## 6. Gold Linked Convertible Notes

On March 14, 1997, the Company issued \$250 million of subordinated unsecured convertible notes ("Notes"). The Notes bear interest at 5% per annum which is payable semi-annually. The Notes mature on March 28, 2002 and are not redeemable prior to maturity.

The Notes include a provision for a further payment on maturity if the gold price increases above the reference price of \$362.15. The incremental payment is calculated by comparing the average gold price for 20 trading days, 55 days prior to maturity, to the reference price. In the event of default this provision is payable. The Company will mark to market the value of the equity component in the event that the gold price is above the reference price and any adjustment will be charged or credited to deficit and included in the Company's earnings per share.

The Note holders have the right to elect to convert the Notes into common shares at maturity. Notwithstanding this election, the Company, at its option, has the right to repay the Notes and any incremental payment if applicable, in common shares, cash or a combination of both common shares and cash. If the Company pays in shares, the common shares are priced at 95% of the weighted average trading price on The Toronto Stock Exchange for 20 consecutive trading days in the period ending five trading days prior to maturity.

The Notes are accounted for in accordance with CICA Section 3860 whereby debt securities which have interest payable in cash and give the issuer the right to settle the principal amount in common shares are split into a liability and equity component. The liability component of the debt is calculated as the present value of the interest payments discounted at a rate estimated to be equivalent to a similar non convertible debt. The net proceeds received from the issuance of the Notes, less the liability component, have been classified as equity.

The balances at December 31 were:

	1998	1997
Liability component of debt - current portion	\$ 9,623	\$ 8,818
- long-term portion	28,077	37,699
	<u>37,700</u>	<u>46,517</u>
Equity component - net of issuance costs	<u>209,753</u>	<u>198,293</u>



The liability component will be reduced by future semi-annual interest payments, net of changes in the present value of the liability component, which are charged to earnings. The equity component will be increased over time by charges to deficit for interest accretion and amortization of issuance costs and at maturity will be equal to the face value of the Notes, plus any increase if applicable, for any additional payment with respect to the reference gold price. During the year the charges to deficit were \$11,460 (1997 - \$8,340)

## 7. Other Liabilities

	December 31,	
	1998	1997
Reclamation provisions - operating properties	\$ 5,374	\$ 3,468
Reclamation provisions - non-operating properties	15,000	17,500
Other	5,485	4,212
	<u>25,859</u>	<u>25,180</u>

## 8. Capital Stock

- (a) Authorized  
Unlimited number of common shares without par value

- (b) Issued  
The Company's issued and outstanding common shares are as follows:

	Number of shares	
Outstanding as at December 31, 1996	162,140,388	\$ 359,257
Shares issued for cash (i)	642,450	4,027
Shares purchased (ii)	(1,000,000)	(2,232)
Outstanding as at December 31, 1997	<u>161,782,838</u>	<u>361,052</u>
Outstanding as at December 31, 1998	<u>161,782,838</u>	<u>\$ 361,052</u>

- (i) Issued on the exercise of stock options (see note (c)).  
(ii) Acquired pursuant to the Company's normal course issuer bid permitting the repurchase of up to five million common shares which expired in August, 1998.

- (c) The Company has granted common share options to certain directors, officers, employees and consultants to attract and retain key personnel. The options expire over periods extending to August 13, 2003.

	Number of shares	Option price (Cdn. \$/share)
Outstanding, December 31, 1996	14,815,834	3.35 to 14.25
Granted	1,560,000	3.88 to 10.55
Exercised	(642,450)	3.35 to 10.00
Terminated	<u>(627,500)</u>	<u>7.88 to 10.55</u>
Outstanding, December 31, 1997	15,105,884	3.88 to 14.25
Granted	5,940,500	2.76 to 4.59
Terminated	<u>(3,916,884)</u>	<u>3.90 to 10.75</u>
Outstanding, December 31, 1998	<u>17,129,500</u>	<u>2.76 to 14.25</u>

- (d) The Company may grant common share options under the Company's 1994 Stock Option Plan to certain directors, officers, employees and consultants for terms up to 10 years and at an exercise price no lower than the market price at the time of the grant.

Options granted to the Chairman, President or CEO vest equally over the first two years with one-third vesting on the date of the grant; all other options vest equally over the first three years with one quarter vesting on the date of the grant. All options granted have five year terms.

In the event of a fundamental change in the ownership and/or capital structure of the Company, all options outstanding will automatically vest and become fully exercisable and the options will continue until the end of their expiry period.

- (e) The loss per share has been calculated using the weighted average number of shares outstanding during the year of 161,782,838 shares (1997 - 162,591,239). The loss is adjusted for charges related to the Gold Linked Convertible Notes totaling \$11,460 (1997 - \$8,340) (note 6). Fully diluted and supplemental fully diluted loss per share have not been presented as they would not be dilutive. Fully diluted earnings per share reflects the maximum possible dilution from the potential conversion of stock options. Supplemental fully diluted loss per share reflects the maximum possible dilution from the potential conversions of the Gold Linked Convertible Notes and stock options.

## 9. Commodity Contracts

The Company's consolidated precious metals program and deferred revenue as at December 31, 1998 is presented below. All contracts are hedge designated as per their maturity.

- (a) Gold  
(ounces expressed in thousands)

	Forward Sales		Spot Deferreds <sup>(1)</sup>		Puts Bought	
	Ounces	\$/oz	Ounces	\$/oz	Ounces	\$/oz
1999	6	481	49	302	200	280
2000	—	—	—	—	200	280
2001	—	—	—	—	200	280
2002	—	—	—	—	200	280
2003	—	—	—	—	50	280
	6	481	49	302	850	280

<sup>(1)</sup> The reported figures include the realized contango to December 31, 1998.

The Company currently has 244,800 ounces of gold contracted under a lease rate swap agreement related to the gold put options. At December 31, 1998 the estimated reduction in the realizable price of the put options to maturity is \$5 per ounce.



- (b) Silver  
(ounces expressed in thousands)

	Net Puts Bought		Calls Sold		Knock Out		Knock In
	Ounces	\$/oz	Ounces	\$/oz	Puts <sup>(1)</sup> Ounces	Calls <sup>(2)</sup> Ounces	Calls <sup>(2)</sup> Ounces
1999	7,000	5.00	—	—	1,800	—	—
2000	3,000	5.00	3,600	5.70	1,800	—	—
2001	—	—	3,450	6.00	—	1,450	—
2002	—	—	3,200	6.00	—	1,200	1,200
2003	—	—	3,200	6.00	—	1,200	1,200
2004	—	—	1,200	6.00	—	1,200	1,200
	<u>10,000</u>	<u>5.00</u>	<u>14,650</u>	<u>5.93</u>	<u>3,600</u>	<u>5,050</u>	<u>3,600</u>

<sup>(1)</sup> The put options knock out if the silver price drops below \$3.68 before contract maturity; the strike price on these options is \$5.70 per ounce and they are included in the net puts bought column.

<sup>(2)</sup> The knock out calls occur if the silver price drops below \$3.50 before contract maturity, while the knock in call options are not exercisable unless silver prices increase above \$8.10 at any time. The strike price on these options is \$6.00 and they are included in the calls sold column.

- (c) The mark to market of the Company's consolidated gold/silver program at December 31, 1998 was an approximate gain of \$1,800.
- (d) Deferred revenue comprises net premiums on open calls, put options and lease rate swap arrangements as well as realized gains and losses on hedging transactions and mark to market adjustments on bullion loans intended to hedge future production. Deferred revenue, which comprises gold hedging gains of \$105,779 less net silver losses of \$45,348, will be recognized as the originally designated hedged production is delivered, and reflected in earnings as follows:

	Revenue
1999	\$ 18,552
2000	21,105
2001	9,758
2002	13,490
2003 and beyond	(2,474)
	<u>60,431</u>

- (e) The Company has entered into contracts which establish a fixed exchange rate on a portion of its future Canadian dollar cash requirements. The Company accounts for these forward contracts as a hedge of future operating costs of Canadian operations. As at December 31, 1998, the Company's consolidated Canadian dollar hedge program consisted of:

	Canadian Dollar Purchases	Rate
1999	\$ 37,600	0.69

The mark to market at December 31, 1998 on these contracts is an estimated loss of \$1.4 million.

## 10. Income Taxes

- (a) Details of income tax expenses are as follows:

For the years ended December 31,	1998	1997
Income taxes		
Current		
Foreign	\$ 7,702	\$ 4,309
Canada	—	—
	<u>7,702</u>	<u>4,309</u>
Deferred		
Foreign	(3,241)	(1,026)
Canada	—	—
	<u>(3,241)</u>	<u>(1,026)</u>
	<u>4,461</u>	<u>3,283</u>

- (b) The reconciliation of the combined Canadian federal and provincial statutory income tax rates to the effective tax rate on earnings is as follows:

For the years ended December 31,	1998	1997
Combined Canadian federal and provincial statutory income tax rate	(43.1) %	(42.3) %
Permanent differences	4.8	7.4
Unrecorded benefit of tax losses	45.6	42.0
Effective tax rate	<u>7.3</u>	<u>7.1</u>

The combined Canadian federal and provincial statutory income tax rate includes the weighted average of Canadian provincial income tax rates, including surtaxes.

Cumulative withholding taxes of \$11,753 (1997 - \$10,179) have been provided on unremitted foreign earnings including \$1,574 in 1998 (1997 - \$167).

- (c) The Company has unutilized tax deductions in Canada of approximately \$117,400 (1997 - \$181,538) which are available to be applied against future taxable income. There has been no recognition in the financial statements for these tax deductions.
- (d) Deferred income taxes are provided as a result of timing differences that arise in the recognition of income and expenses for financial reporting and tax purposes. The sources of timing differences and the related deferred tax amounts are as follows:

	December 31,	
	1998	1997
Depletion and depreciation	\$ 10,041	\$ 7,774
Other, including accrued withholding taxes	10,629	16,271
	<u>20,670</u>	<u>24,045</u>



## 11. Segmented Information

The Company's industry segments are concentrated in the development and mining of precious metals in North and South America and in Europe. Gold and silver are currently the primary commodities produced. Details of the Company's financial information segmented operationally are as follows:

For the year ended December 31, 1998

\$	La Coipa	Crixás	Brasília	New Britannia	Musselwhite	Greece	Corporate/ Other	Total
Revenue	67,075 <sup>(1)</sup>	20,329	25,784	21,472	18,864	—	8,587	162,111
Cost of sales	36,158	11,623	20,409	11,783	11,790	—	—	91,763
Depletion and depreciation	26,045	4,143	7,714	4,848	7,504	—	360	50,614
	62,203	15,766	28,123	16,631	19,294	—	360	142,377
Earnings (loss) from operations	4,872	4,563	(2,339)	4,841	(430)	—	8,227	19,734
Administration	—	—	—	—	—	—	12,401	12,401
Exploration	1,313	83	—	855	216	—	3,793	6,260
Other	(3,196)	468	(896)	437	272	—	65,520 <sup>(2)</sup>	62,605
	(1,883)	551	(896)	1,292	488	—	81,714	81,266
Earnings (loss) before taxes	6,755	4,012	(1,443)	3,549	(918)	—	(73,487)	(61,532)
Income taxes	2,069	438	—	—	—	—	1,954	4,461
Net earnings (loss)	4,686	3,574	(1,443)	3,549	(918)	—	(75,441)	(65,993)
Capital expenditures	11,937	3,129	2,434	2,768	1,708	65,986	6,591	94,553
Capital assets	132,453	31,092	71,276	27,691	58,180	225,562	11,575	557,829
Total assets	166,630	38,950	143,399	30,901	61,639	248,013	60,630	750,162

For the year ended December 31, 1997

\$	La Coipa	Crixás	Brasília	New Britannia	Musselwhite	Greece	Corporate/ Other	Total
Revenue	70,374 <sup>(1)</sup>	22,328	17,067	19,311	14,751	—	17,580	161,411
Cost of sales	44,584	11,978	11,129	12,621	9,704	—	2,017	92,033
Depletion and depreciation	19,485	3,884	5,331	4,936	5,643	—	936	40,215
	64,069	15,862	16,460	17,557	15,347	—	2,953	132,248
Earnings (loss) from operations	6,305	6,466	607	1,754	(596)	—	14,627	29,163
Administration	—	—	—	—	—	—	14,225	14,225
Exploration	1,138	422	—	1,539	587	—	10,307	13,993
Other	454	56	1,765	750	82	—	44,312 <sup>(3)</sup>	47,419
	1,592	478	1,765	2,289	669	—	68,844	75,637
Earnings (loss) before taxes	4,713	5,988	(1,158)	(535)	(1,265)	—	(54,217)	(46,474)
Income taxes	1,815	1,165	365	—	—	—	(62)	3,283
Net earnings (loss)	2,898	4,823	(1,523)	(535)	(1,265)	—	(54,155)	(49,757)
Capital expenditures	11,527	3,720	12,532	3,894	24,226	63,052	17,895	136,846
Capital assets	145,482	32,081	76,012	29,976	64,301	159,175	75,251	582,278
Total assets	172,552	41,134	147,590	34,759	68,778	192,638	146,161	803,612

<sup>(1)</sup> Revenue includes \$51,284 and \$31,850 in 1998 and 1997 respectively for silver.

<sup>(2)</sup> Includes the write down of non-operating assets for Czech Republic (\$31,419) and Russia (\$35,761).

<sup>(3)</sup> Includes closure provision for Mineral Hill (\$17,500) and write off of Pachicutza property (\$11,356).

Geographic segments are as follows:

		1998		1997
<b>Revenue</b>				
Canada	\$	48,923	\$	51,642
Chile		67,075		70,374
Brazil		46,113		39,395
		<b>162,111</b>		<b>161,411</b>
<b>Identifiable assets</b>				
Canada	\$	134,832	\$	175,082
Chile		168,772		172,799
Brazil		192,668		198,841
Greece		248,013		192,638
Other		5,877		64,252
		<b>750,162</b>		<b>803,612</b>

## 12. Commitments and Contingencies

### (a) Hellenic Gold Litigation

The Ontario Court (General Division) issued its judgement in connection with the claim against TVX Gold Inc. ("TVX") by three individuals (collectively the "Alpha Group") on October 14, 1998 relating to TVX's interest in the Kassandra mining assets in Greece. The Alpha Group alleged that TVX breached fiduciary duties owed to the Alpha Group and misused confidential information supplied to TVX by the Alpha Group and claimed, among other things:

- (i) a declaration that TVX holds the Kassandra orebodies in trust for the Alpha Group; or
- (ii) that TVX holds a 12% carried interest in Kassandra in trust for the Alpha Group and a further 12% "right to purchase" in Kassandra;
- (iii) damages in the amount of Cdn\$500 million; and
- (iv) punitive damages in the amount of Cdn\$1 million.

The Court rejected the full ownership and monetary damages claims but did award the Alpha Group a 12% carried interest and a right to acquire a further 12% participating interest in the Kassandra mining assets. TVX has filed a notice to appeal and the Alpha Group has filed a notice of cross-appeal. The Company continues to deny the claims made by the plaintiff. The amount of the loss, if any, can not be determined at this time.

### (b) Hellenic Gold Commitments

In addition to the secured payment for the balance of the purchase price (see note 5(a)) and pursuant to the acquisition of the Hellenic Gold assets in 1995 the Company has the obligation to fulfill the following:

- (1) Gold Plant Guarantee - the Company is obligated to construct a gold plant within two years from receiving all applicable licences, which may be extended by a further eight months under certain circumstances. The Company has provided a letter of guarantee of approximately \$10 million against this commitment,
- (2) Employment Guarantee - the Company is obligated to maintain 550 employees, and a further 50 employees once the gold plant is completed, for a minimum period of three years. The Greek government is obligated to provide an allowance of 50% of the cost to employ 50 of these employees for a six month period and an additional 50 employees for a three year period. Additionally, employment must be offered by the contractor to 150 former employees of Hellenic Gold for a period of 18 months, during the construction of the gold plant. The Company is also obligated to employ at least 477 employees for a period of 10 years to maintain its eligibility for government grants.



**(c) Uncertainty Due to the Year 2000 Issue**

The year 2000 issue arises because many computerized systems use two digits rather than four to identify a year. Date sensitive systems may recognize the year 2000 as the year 1900 or some other date, resulting in errors when information using year 2000 dates is processed. In addition, similar problems may arise in some systems that use certain dates in 1999 to represent something other than a date. The effects of the year 2000 issue before, on, or after January 1, 2000 and the effects on operations and financial reporting, if not addressed, may range from minor errors to significant systems failure that could affect an entity's ability to conduct normal business operations. It is not possible to be certain that all aspects of the year 2000 issue affecting the Company, including those related to the efforts of customers, suppliers, or other third parties, will be fully resolved.

**13. Subsequent Event**

In mid January 1999, the Central Bank of Brazil changed its Brazilian exchange rate policy. As a result, the Brazilian Real devalued by more than 50% relative to the US dollar when compared to the rate prevailing on December 31, 1998. To date, it is not possible to determine whether the dollar rate will remain at the same level and how these events might impact entities' operations and equity in the future.

**14. Differences Between Canadian and United States Generally Accepted Accounting Principles**

The Company prepares its financial statements in accordance with accounting principles generally accepted in Canada ("Canadian GAAP") which generally conform to generally accepted accounting principles in the United States ("US GAAP") except for the following significant differences:

- (a) Under Canadian GAAP deferred income taxes are determined using the deferral method whereby deferred income taxes are provided for timing differences based on tax rates in effect when the timing difference arises. Under US GAAP, income taxes are determined using the liability method whereby deferred income taxes are provided for temporary differences using tax rates expected to apply when the differences reverse.

US GAAP SFAS 109 requires that deferred taxes be provided for differences between the tax basis of an asset or liability. This difference results in an increase in both mining property, plant and equipment and deferred income taxes.

Under Canadian GAAP, the Company has not recorded the tax benefits of certain losses as it did not have virtual certainty that such benefits would be realized. Under US GAAP, the Company has recorded the benefits of such losses on the basis that it is more likely that the benefits will be realized in future years through future taxable income.

- (b) Under Canadian GAAP, the Notes have been accounted for under a components approach whereby the Notes are presented as a liability and equity component as explained in note 6. Under US GAAP, these Notes would be treated as long-term debt and all interest amounts and amortization of debt issue costs would be included in income.
- (c) Under Canadian GAAP, foreign currency contracts are recorded when the corresponding hedge designated period is reached. Under US GAAP, they are marked to market and recorded in earnings currently.

- (d) Under Canadian GAAP, for purposes of the consolidated statements of cash flows, cash is presented net of bank indebtedness. Under US GAAP, bank indebtedness would be classified as a financing activity.

As a result of the above, the following would be adjusted:

	1998	1997
<b>Statements of Operations</b>		
Loss in accordance with Canadian GAAP	\$ (65,993)	\$ (49,757)
Depletion and depreciation (a)	(2,293)	(2,746)
Interest expense (b)	(5,655)	(4,522)
Non-operating asset write downs (a)	(9,308)	—
Foreign exchange loss (c)	(1,400)	—
Income taxes (a)	12,386	9,256
Loss in accordance with US GAAP and comprehensive earnings under US GAAP	(72,263)	(47,769)
Loss per share under US GAAP	(0.45)	(0.29)
<b>Balance Sheets</b>		
Mining property, plant and equipment	580,343	611,130
Current liabilities	92,904	95,268
Deferred taxes (asset) liability	(537)	15,225
Long-term debt	346,755	348,803
Shareholders' equity	247,264	319,527
<b>Statements of Cash Flows</b>		
Cash provided from operations	81,036	20,001
Cash used for investing	(89,567)	(203,748)
Cash (used for) provided from financing activities	(7,285)	163,977
Net cash, end of year	41,232	57,048

The Company is reviewing the potential impact of two recent Financial Accounting Standards Board ("FASB") releases.

- FASB has issued SFAS No. 133, "Accounting for Derivative Instruments and Hedging Activities". This new standard requires companies to record derivatives on the balance sheet as assets or liabilities, measured at their fair value. Gains or losses resulting from changes in the values of those derivatives would be accounted for depending on the use of the derivative and whether it qualifies for hedge accounting. The Company is analysing the impact of SFAS No. 133 and will adopt it for US GAAP purposes in the year 2000.
- FASB also issued a Statement of Principles ("SOP") 98-5 - Start-up Costs. This new statement requires that certain defined start-up costs be expensed as incurred. The Company is currently analysing the impact of this standard.

X FX  
= 381330  
✓



## Glossary

**Arsenopyrite** – an iron arsenic sulphide, FeAsS.

**Backfill** – waste rock from mining operations or tailings from milling operations which is transported underground to fill mined out areas.

**Biooxidation** – the oxidation of elements, caused by naturally occurring bio-organisms in rock; for example, the rusting of iron. Biooxidation in a gold recovery process is enhanced by providing the optimum temperature, acidity (pH) and level of oxygen for the natural oxidation process to work more effectively. The bio-organisms only survive under very specific circumstances, including the presence of sulphide rock; they are harmless to all forms of life.

**By-product credit** – revenue, net of transportation, refining and treatment charges, from the sale of metals derived in conjunction with the production of the primary mine metal. The revenue is applied as a reduction to the primary metal cash cost calculations.

**Carbon-in-leach (CIL)** – a process to recover dissolved gold onto activated carbon. The activated carbon is introduced into a gold ore-cyanide slurry during the agitation process and is subsequently separated from the slurry for the removal of the gold.

**Carbon-in-pulp (CIP)** – a process, similar to CIL, to recover dissolved gold onto activated carbon. The activated carbon is introduced to the system after the gold has been dissolved by the cyanide solution.

**Cash cost** – includes production costs, royalties, marketing and refining charges, together with all administration expenses at the operating level.

**Commercial production** – production for accounting purposes.

**Cut-and-fill** – a mining method in which ore is mined in horizontal slices. After a slice is mined and the ore is removed, the remaining void is filled with waste before the next slice is mined.

**Cut-off grade** – the lowest grade of mineralized material considered economic; used to calculate ore reserves in a given deposit.

**Cyanide leaching** – a method of dissolving gold and/or silver in a weak solution of sodium or potassium cyanide.

**Dip** – the angle, measured from the horizontal, at which a planar feature such as an orebody is inclined. Measured at a right angle to the strike.

**Disseminated ore** – ore carrying small particles of valuable minerals, spread more or less uniformly through the rock.

**Doré** – unrefined gold and silver bars, usually consisting of approximately 90 per cent or more precious metals that will be further refined to almost pure metal.

**Drift and Fill** – An underground mining method whereby the ore is mined by drifting along the mineralization and back filling the resulting open space so that the next level can be mined.

**Feasibility study** – a comprehensive study to determine if a project is economically feasible; its conclusions will determine if a production decision can be made and be used for financing arrangements.

**Flotation** – a process by which some mineral particles are induced, by the introduction of specific reagents, to become attached to bubbles and float while other particles sink, so the valuable minerals are concentrated and separated from the worthless gangue.

**Formation** – the ordinary unit of geologic mapping, consisting of a large and persistent stratum of rock.

**Gold equivalent** – gold plus silver expressed in equivalent ounces of gold using a conversion ratio dependent on prevailing gold and silver prices.

**Grade** – the amount of valuable mineral in a specific volume of rock, typically expressed as grams per tonne for precious metals and as a percentage for base metals.

**Grassroots exploration** – preliminary, early-stage exploration.

**Gravity separation** – recovery of gold from crushed rock using gold's high specific gravity to separate it from lighter material.

**Headframe** – the building at the top of a shaft, which houses the hoisting equipment.

**Hedging** – an arrangement that effectively offsets a price or exchange risk inherent in another transaction or arrangement.

**Hydrometallurgy** – the selective dissolution of metals from ore or concentrates.

**ISO 9000** – a series of international standards (eg. ISO 9001 – 9003) that guide organizations in implementing quality management systems and quality assurance programs.

**ISO 14000** – a series of international standards (eg. ISO 14000 – 14005) that guide organizations in implementing sound environmental management systems.

**Infill drilling** – drilling between previously drilled holes to provide additional geological information to more accurately define the parameters of the mineralization.

**Merrill-Crowe** – a precipitation process to recover precious metals from a cyanide solution using zinc dust.

**Mill** – the plant where ore is ground, usually to a fine powder, and the economic metals are extracted by physical and/or chemical means.

**Mineralized zone** – any mass of host rock in which minerals of potential commercial value occur.

**Net smelter return (NSR)** – a share of the net revenue generated from the sale of metal produced by the mine.

**Open pit** – the term for a mine on surface.

**Ounces** – troy ounces of a fineness of 999.9 parts per 1,000 parts, equal to 31.1034 grams.

**Oxide ore** – mineralized rock in which the minerals have been partially or wholly oxidized by weathering processes.

**Porphyry** – rocks containing large crystals in a fine-grained groundmass.

**Pressure Oxidation (Autoclave)** – an oxidation process in which high temperatures and pressures are applied to convert refractory sulphide mineralization into amenable oxide ore.

**Production cost** – cash cost plus depreciation, amortization and reclamation.

**Pyrite** – an iron sulphide,  $\text{FeS}_2$ .

**Pyrrhotite** – an iron sulphide,  $\text{FeS}$ .

**Raise** – a vertical or inclined opening in a mine driven upward from a level to connect with the level or to surface.

**Reagent** – a chemical used in the mineral recovery process.

**Reclamation** – the process by which lands disturbed as a result of mining activity are turned back to a beneficial land use. Reclamation activity includes the removal of buildings, equipment, machinery, and other physical remnants of mining; the closure of tailings impoundments, leach pads and other mine features, and the contouring, covering and revegetation of waste rock piles and other disturbed areas.

**Refractory ore** – gold mineralization in which the gold is encapsulated within silica or sulphide and is therefore not amenable to cyanide leaching methods. The ore must be pretreated eg. by biooxidation.

## Reserves and resources

### Reserves

A **reserve** is that part of a resource that can be mined at a profit under current or reasonably anticipated economic conditions which are specified. In addition to the information required for a resource estimate, the technical, operating, legal and financial factors must be considered in a reserve estimate.

**Proven reserve** is the estimated quantity and grade of that part of a measured resource for which the size, grade and distribution of values, together with technical and economic factors, are so well established that there is the highest degree of confidence in the estimate. The term should be restricted to that part of a deposit being mined, or being developed, and for which there is a mining plan.

**Probable reserve** is the estimated quantity and grade of that part of an indicated resource for which the economic viability has been demonstrated by adequate information on engineering, operating, economic and legal factors, at a confidence level that will allow positive decisions on major expenditures.



Resources

**Mineral resource** is a deposit in such quantity and at such a grade that extraction of the material at a profit is currently or potentially possible. A mineral resource estimate is based on the geology of a deposit and the continuity of mineralisation. The level of information and the degree of understanding are indicated by the category to which an estimate is assigned. A number of factors which are assumed in estimating a resource are related to economic and operating conditions, particularly cut-off grades and minimum widths.

**Measured resource** is the estimated quantity and grade of that part of a deposit for which the size, configuration and grade have been very well established by observation and sampling of outcrops, drill holes, trenches and mine workings.

**Indicated resource** is the estimated quantity and grade of that part of a deposit for which the continuity of grade, together with the extent and shape, are so well established that a reliable grade and tonnage estimate can be made.

**Inferred resource** is the estimated quantity and grade that is determined on the basis of limited sampling, but for which there is sufficient geological information and a reasonable understanding of the continuity and distribution of metal values to outline a deposit of potential economic merit.

**Room-and-pillar** – a method of mining flat-lying deposits in which the mined-out ore or 'rooms' are separated by pillars.

**Shaft** – a vertical passageway to an underground mine for moving personnel, equipment, supplies and material including ore and waste rock.

**Spot price** – current delivery price of a commodity traded in the spot market, also called the cash price.

**Stope** – the working area in a mine from which ore is extracted.

**Strike** – the direction, or course or bearing, of a vein or rock formation measured on a level surface.

**Stripping ratio** – the ratio of the amount of waste material which must be removed in an open pit to allow one tonne of ore to be mined.

**Sulphide** – a mineral compound characterized by the linkage of sulphur with a metal or semimetal; eg., galena, PbS, or pyrite, FeS<sub>2</sub>.

**Tailings** – material rejected from a mill after the valuable minerals have been recovered.

Metric Conversion Table

Imperial	Metric
1 troy ounce	31.103 grams
1 ton, short	0.907 tonnes
1 ton, long	1.016 tonnes
1 troy ounce per ton	34.286 grams per tonne
1 foot	0.305 metres
1 mile	1.609 kilometres
1 acre	0.405 hectares

**TVX Gold Inc.**
**Summary of Quarterly Information**

(thousands of United States dollars, except per share amounts)

1998	March 31	Quarters Ended		Dec 31	Full Year Dec 31
		June 30	Sept 30		
Revenue	\$ 37,251	\$ 39,977	\$ 40,584	\$ 44,299	\$162,111
Operating earnings	3,987	7,047	4,338	4,362	19,734
Net earnings (loss)	568	2,394	112	(69,067)	(65,993)
Loss per share	(0.02)	(0.00)	(0.02)	(0.44)	(0.48)
Total assets	791,731	787,198	819,543	750,162	750,162
Long-term debt	165,387	175,097	202,453	198,995	198,995
Shareholders' equity	476,973	479,367	479,479	410,414	410,414
Cash provided by operations	40,958	14,272	14,570	15,049	84,849

**1997**

Revenue	\$ 36,257	\$ 41,957	\$ 45,833	\$ 37,364	\$161,411
Operating earnings	7,237	9,480	7,222	5,224	29,163
(Loss) net earnings	(342)	(3,380)	1,579	(47,614)	(49,757)
Loss per share	(0.00)	(0.04)	(0.01)	(0.31)	(0.36)
Total assets	882,161	730,770	761,855	803,612	803,612
Long-term debt	68,446	68,233	74,236	145,433	145,433
Shareholders' equity	529,886	525,060	526,839	476,407	476,407
Cash (used for) provided by operations	(2,086)	(7,374)	20,526	13,457	24,523

**Share Prices**

 The Toronto Stock Exchange  
(Cdn\$)

	High	1998 Low	Volume (millions)	High	1997 Low	Volume (millions)
First quarter	5.20	3.60	36.6	12.25	9.40	42.5
Second quarter	6.45	4.01	26.8	10.10	7.20	23.3
Third quarter	4.60	1.75	43.2	8.80	5.80	34.7
Fourth quarter	4.80	2.58	41.3	9.05	3.20	31.8
	147.9			132.3		

 New York Stock Exchange  
(US\$)

	High	1998 Low	Volume (millions)	High	1997 Low	Volume (millions)
First quarter	3.69	2.44	39.3	9.00	7.00	30.9
Second quarter	4.50	2.75	33.5	7.25	5.38	22.7
Third quarter	3.19	1.06	38.0	6.44	4.31	23.3
Fourth quarter	3.19	1.63	37.1	6.56	2.31	29.2
	147.9			106.1		

## Seven-Year Financial Summary

TVX Gold Inc.

(thousands of United States dollars, except per share amounts)

For the Years Ending December 31:	1998	1997	1996	1995	1994	1993	1992
<b>Operating Results</b>							
Revenue	\$ 162,111	\$ 161,411	\$ 154,194	\$ 156,948	\$ 157,175	\$ 163,421	\$ 152,357
Mine operating costs							
Cost of sales	91,763	92,033	92,896	90,667	84,255	75,571	73,408
Depletion and depreciation	50,614	40,215	38,238	37,615	41,567	45,875	39,363
	142,377	132,248	131,134	128,282	125,822	121,446	112,771
Earnings from mining operations before mine write downs	19,734	29,163	23,060	28,666	31,353	41,975	39,586
Mine property write downs	-	17,500	94,668	-	-	-	-
Earnings (loss) from operations	19,734	11,663	(71,608)	28,666	31,353	41,975	39,586
Other expenses (income)							
Corporate administration	12,401	14,225	12,206	10,057	7,511	6,637	5,177
Interest expense	5,456	5,334	12,270	7,225	7,395	13,883	18,347
Exploration	6,260	13,993	17,652	18,991	15,645	5,113	3,105
Non-operating asset write downs	67,180	18,070	-	-	-	-	-
Translation and foreign exchange loss (gain)	1,886	1,688	1,300	1,642	(11,649)	(1,687)	(855)
Interest income	(9,816)	(9,050)	(16,879)	(15,825)	(18,797)	(2,313)	(3,670)
Other, net	(2,101)	13,877	(17,455)	(2,811)	373	(1,734)	439
	81,266	58,137	9,094	19,279	478	19,899	22,543
(Loss) earnings before income taxes	(61,532)	(46,474)	(80,702)	9,387	30,875	22,076	17,043
Income taxes	4,461	3,283	5,253	(27)	8,096	6,351	6,641
(Loss) net earnings	(65,993)	(49,757)	(85,955)	9,414	22,779	15,725	10,402
<b>Financial Position</b>							
Cash and cash equivalents	\$ 41,232	\$ 57,048	\$ 76,818	\$ 56,141	\$ 122,154	\$ 2,507	\$ (592)
Total assets	750,162	803,612	661,452	614,180	540,398	393,418	413,862
Working capital	66,229	65,886	18,977	54,526	31,017	19,172	14,626
Total debt (including bank indebtedness)	198,995	214,446	223,955	134,226	80,558	128,526	162,518
Operating cash flow	84,849	24,523	35,615	40,742	56,597	52,910	49,219
Capital expenditures	94,553	136,846	142,489	126,518	51,715	14,198	9,445
Shareholders' equity	410,414	476,407	335,000	412,402	400,308	219,558	199,930
Ratio of total debt to total debt and equity	0.33:1	0.31:1	0.40:1	0.25:1	0.17:1	0.37:1	0.45:1
<b>Operational Data</b>							
Production (oz)							
Gold	324,600	318,300	335,100	359,500	357,400	360,400	314,300
Silver	9,886,900	5,140,500	6,769,000	4,713,000	5,749,000	6,645,000	8,064,000
Gold and gold equivalent	499,100	395,300	424,500	423,100	436,900	438,800	406,400
Sales (oz)							
Gold	323,400	325,800	314,000	348,600	345,700	359,400	317,800
Silver	9,780,000	5,855,500	5,671,000	4,745,000	5,591,000	6,859,000	7,993,000
Gold and gold equivalent	495,500	413,500	388,800	413,100	422,900	440,300	409,100
Cash cost per ounce of gold equivalent sold	\$ 185	\$ 223	\$ 239	\$ 219	\$ 199	\$ 172	\$ 179
Revenue per ounce of gold equivalent sold	\$ 327	\$ 390	\$ 397	\$ 380	\$ 372	\$ 371	\$ 372
<b>Per Share Information</b>							
Weighted average number of common shares outstanding (millions)	161.8	162.6	162.2	160.4	158.4	134.6	134.0
(Loss) net earnings per share	\$ (0.48)	\$ (0.36)	\$ (0.53)	\$ 0.06	\$ 0.14	\$ 0.12	\$ 0.08
Operating cash flow per share	\$ 0.52	\$ 0.15	\$ 0.22	\$ 0.25	\$ 0.36	\$ 0.39	\$ 0.37



## Directors

**N. Eike F. Batista**  
Chairman, President and  
Chief Executive Officer  
TVX Gold Inc.  
Rio de Janeiro, Brazil

**John H. Craig**  
Partner,  
Cassels Brock & Blackwell  
Toronto, Canada

**A.C. Patrick J. Keenan**  
Chairman and  
Chief Executive Officer,  
Keewhit Investments Ltd.  
Toronto, Canada

**A.N. C. Nigel Lees**  
Chief Executive Officer,  
The Sunblush Technologies  
Corporation  
Toronto, Canada

**A.C.N. E. Ian Rugeroni**  
Chief Executive Officer,  
Dubai Aluminium Co. Ltd.  
Dubai, U.A.E.

**C.N. Paul Soros**  
Private Investor,  
New York, U.S.A.

**Mark I. Young**  
Partner,  
Cassels Brock & Blackwell  
Toronto, Canada

A. Audit committee member

C. Compensation committee member

N. Nominating committee member

## Officers

**Eike F. Batista**  
Chairman, President and  
Chief Executive Officer

**Clifford J. Davis**  
Senior Vice President and  
Chief Operating Officer

**Alan M. De'ath**  
Senior Vice President and  
Chief Financial Officer

**Flavio Godinho**  
Senior Vice President,  
Corporate Development

**Kenneth J. Sangster**  
Senior Vice President,  
European Operations

**Albrecht G. Schneider**  
Senior Vice President,  
Exploration

**Ross S. Brown**  
Vice President,  
Human Resources

**Ian A. Horne**  
Vice President,  
Environment

**R. Gregory Laing**  
Vice President, Legal and  
Corporate Secretary

**Paul D. Martin**  
Vice President,  
Corporate Finance

**Melvyn Williams**  
Vice President,  
Finance, Europe

**Judy A. Faintuck**  
Treasurer

## Corporate Data

**Registered Office**  
TVX Gold Inc.  
161 Bay Street, Suite 4300  
Toronto, Ontario  
Canada M5J 2S1  
Telephone: 416 366 8160  
Fax: 416 366 8163

**Stock Exchange Listings**  
(Trading Symbol – TVX)  
The Toronto Stock Exchange  
The Montreal Exchange  
New York Stock Exchange

**Transfer Agent**  
Montreal Trust Company  
151 Front Street West,  
8th Floor  
Toronto, Canada M5J 2N1

**Inquiries**  
Inquiries relating to shareholdings  
should be directed to the  
Montreal Trust Company  
at the address above or:  
Telephone 416 981 9633  
or 800 663 9097

**Annual Report**  
Additional copies of the  
annual report and copies of  
the Annual Information Form  
(the Canadian equivalent of  
the United States 10-K Report)  
may be obtained by  
contacting the Company.

**Investor Relations**  
Telephone: 416 366 8160  
Fax: 416 366 8163  
Toll Free: 877 TVX GOLD  
E-Mail: [info@tvxgold.com](mailto:info@tvxgold.com)

**Internet Website**  
[tvxgold.com](http://tvxgold.com)

### ANNUAL MEETING

#### June 16, 1999

The Annual Meeting of Shareholders  
will be held at  
10:00 a.m. on Wednesday,  
June 16, 1999  
at the Toronto Hilton Hotel  
Toronto I Room  
145 Richmond Street West,  
Toronto, Canada



Printed in Canada on recycled papers  
using vegetable based inks.

*Production*  
Walter J. Mishko & Co. Inc.

*Design*  
Goodhoofd Inc.

*Editorial Services*  
Allman & Associates

*Principal Photography*  
Louie Palu

*Film Production*  
Graphic Specialties Limited

*Printing*  
Arthurs-Jones Clarke  
Lithographing Limited





TVX Gold Inc.